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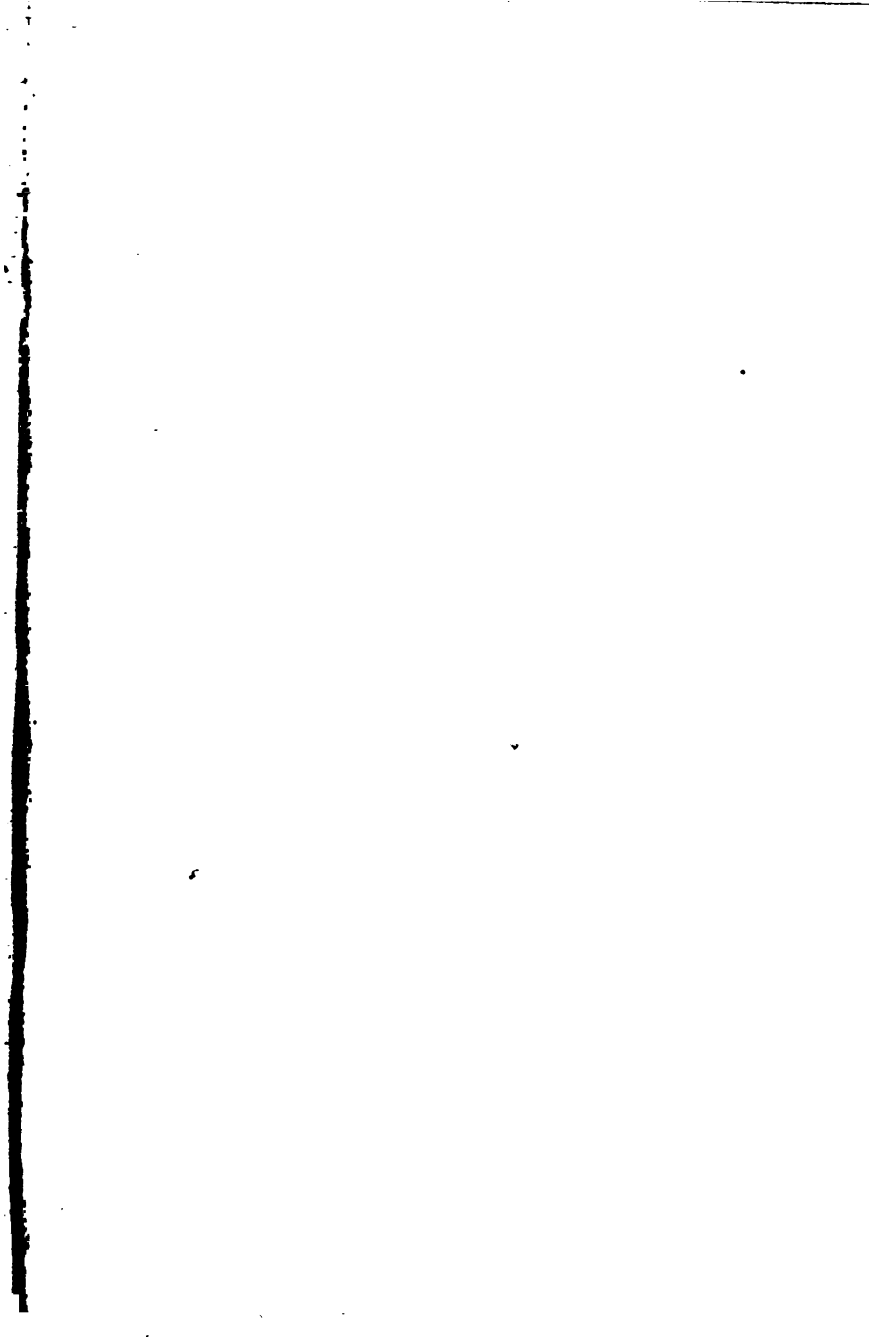
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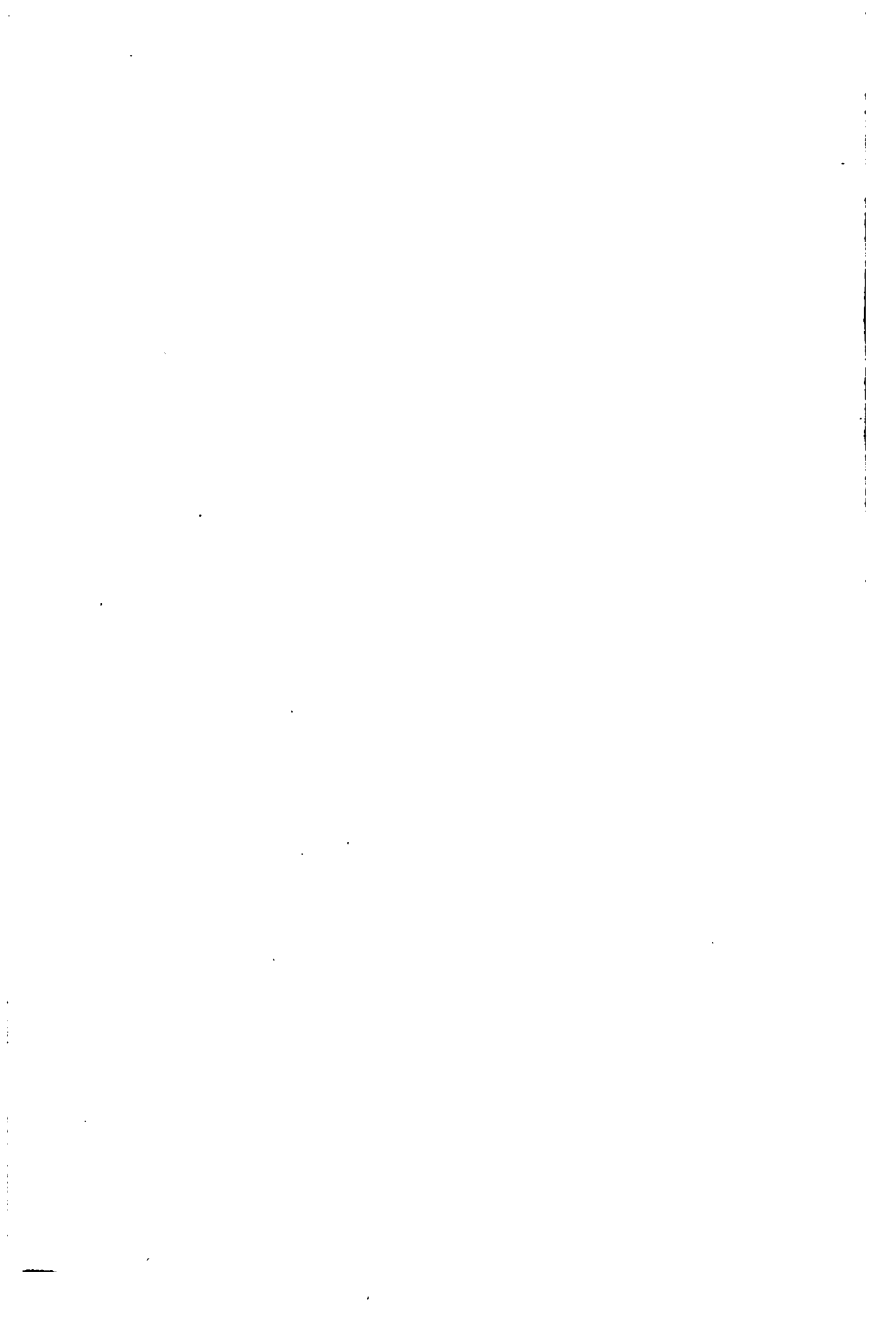
CHARLES SUMNER

CLASS OF 1830

SENATOR FROM MASSACHUSETTS

**FOR BOOKS RELATING TO
POLITICS AND FINE ARTS**





HAZELL'S

ANNUAL CYCLOPÆDIA

1886

CONTAINING

*EARLY 2000 CONCISE AND EXPLANATORY ARTICLES, ON
EVERY TOPIC OF CURRENT POLITICAL, SOCIAL AND
GENERAL INTEREST REFERRED TO BY THE
PRESS AND IN DAILY CONVERSATION.*

EDITED BY

E. D. PRICE, F.G.S.,

ASSISTED BY A LARGE NUMBER OF CONTRIBUTORS, INCLUDING
SOME OF THE MOST EMINENT SPECIALISTS OF THE DAY.

REVISED TO THE END OF MARCH, 1886.

1st year of issue.

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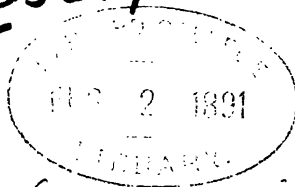
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1886.

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Summer fund.
(1886-1889.)

For Summary of Mr. Gladstone's Home Rule Scheme, important Board of Trade Returns, and other valuable Statistics received at the time of going to Press, see Addenda, pp. 562—566.

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EDITOR'S PREFACE.

IN presenting this New Annual to the public, a few words briefly indicating the purpose and scope of the undertaking are, we think, desirable. The work owes its origin to a conviction on the part of its promoters, that most Englishmen who wish to keep *au courant* with the questions of the day, and regular readers of the daily, weekly and monthly press, often misunderstand or altogether fail to appreciate the precise value of certain points raised, or to follow the exact train of reasoning, on account of their non-acquaintance with the full bearings of the question under discussion, or with a reference or phrase employed therein.

Our object is to meet this difficulty, which is already imposing, but will be more so as the public interests widen, and newspaper extension further increases.

It is claimed for this work that it provides **up-to-date** information only on such subjects as are now, or are likely soon to be, in the mind of the public—thus forming a companion to the newspaper, and a guide to every-day topics and conversation, supplementing rather than seeking to displace the existing cyclopædias, year-books and almanacs already in general and well merited use.

The scope thus implied is the precise measure of the contents of the book: no attempt has been made to treat old subjects in detail or elaborately; the principal information provided being that of quite recent date, and this mainly on subjects of to-day. Where, however, an entirely new subject is treated, or an old subject illustrated from entirely new standpoints or theories, a comprehensive view of it is given, sufficiently explanatory to convey a clear and intelligent idea.

The essential features that have been kept prominently in view for the work are that it shall be—

1. Issued **as early in the year** as will secure the latest Parliamentary returns; with additions, excisions, emendations and corrections from year to year, as the march of events may dictate.
2. Absolutely and uniformly **up to date**, a certain day being fixed in each year for the closure of all articles.
3. Confined to plain and **impartial statements**, all treatment of a controversial or party nature being avoided.
4. Thoroughly **accurate** and trustworthy.

The chief subjects have been, and will continue to be, treated by some of the foremost specialists of the day; neither trouble nor expense being spared to render all information absolutely reliable, and from the first and most responsible sources.

It is thought that this volume will occupy a unique position amongst books of **Ready Reference**, and that it will be of special value to Parliamentary men, members of Local Parliaments, Debating and other Societies, Journalists, Literary men, and indeed to all who desire to render themselves intelligently conversant with the salient points and progress of modern thought and events.

Concise biographies of all the members of the New Parliament are given,—the House of Lords, the most prominent foreign politicians, distinguished men deceased during the year, and the leading representatives of schools of modern thought in England.

A word of explanation is perhaps necessary with regard to the other biographical portions of the work. Only the names of those who represent some particular school or phase of thought, literary, religious or social, have been included; but, with every desire to avoid omissions, it is to be feared that some names which might justly be considered to possess a claim to notice in our pages may inadvertently have been overlooked.

Copious cross-references form an important feature of the work. All subjects thus cross-referenced and emphasized will be found indicated by **thicker type** in the articles in which they occur. The eye is thus enabled to find what it is in search of instantly.

To assist the reader in thoroughly investigating certain special subjects on which he may desire more exhaustive information, many references to the best literature on the subject have been given.

The Editor is conscious that notwithstanding the exercise of the utmost care in the arrangement and production of a work of this nature—with its multiplicity of detail, necessarily implying great labour—there may nevertheless be found in this first edition some errors both of commission and omission. He would therefore esteem it a favour if any reader of the book detecting any serious inaccuracies would kindly communicate the same to him, in order that the next edition may be as perfect as possible.

He takes this opportunity of cordially acknowledging the invaluable assistance he has received from the large body of gentlemen who have contributed to the work; of expressing his thanks to all who have courteously aided him by supplying various items of information; and his indebtedness to the *Times* and standard works which may have been consulted.

April 6th, 1886.

THIS year is the 6599th from the Creation of the World, according to the Julian Period; the 5647th (commencing Thursday, September 30th) according to the Hebrew calculation; and the 7304th of the Byzantine Era. It is the 1304th of the Mohammedan Era—the Hegira, or Flight of Mahomet to Mecca commencing on September 30th; the Ramadan, or month's fast of his followers, commencing on Thursday, June 3rd, 1886.

QUARTERS OF THE YEAR.—Greenwich Time.

Spring Quarter begins . . . March 20, at 4 p.m. | Autumn Quarter begins . . . Sept. 22, at 3 p.m.
Summer Quarter begins . . . June 21, at 1 a.m. | Winter Quarter begins . . . Dec. 21, at 9 p.m.

ECLIPSES.

During the year 1886 there will be two eclipses, both of the Sun. The first is an annular eclipse, on March 5th; the second a total eclipse, on August 29th,—neither of them being visible in Great Britain.

LAW SITTINGS.

Hilary Sittings . . . begin Jan. 11 . . . end April 21 | Trinity Sittings . . . begin June 22 . . . end Aug. 12
Easter Sittings . . . begin May 4 . . . end June 11 | Michl. Sittings . . . begin Oct. 24 . . . end Dec. 21

UNIVERSITY TERMS.

OXFORD.

Lent begins Jan. 14 . . . ends April 17
Easter " April 28 . . . " June 11
Trinity " June 12 . . . " July 6
Michaelmas " Oct. 10 . . . " Dec. 17

CAMBRIDGE.

Lent begins Jan. 8 . . . ends April 5
Easter " April 27 . . . " June 24
Michaelmas " Oct. 1 . . . " Dec. 19

A CALENDAR (MARCH 1886 TO FEBRUARY 1887), WITH THE LESSONS FOR EACH SUNDAY.

MARCH, 1886.

1	M	First Reform Bill introduced, 1831.
2	Tu	Hostilities against the Chinese, 1841.
3	W	Emancipation of the Russian serfs, 1861.
4	Th	Installation of President Cleveland, U.S., 1885.
5	F	Catholic Emancipation Bill passed, 1829.
6	S	Royal Commission on Housing the Poor met, 1884.
7	S	<i>Quinquagesima. M.L.</i> —Gen. 9 to v. 20, Mark 7 v. 24 to 8 v. 10; <i>E.L.</i> —Gen. 12 or 13, [Rom. 16.
8	M	Battle of Aboukir, 1801.
9	Tu	War between France and Mexico terminated, 1839.
10	W	<i>Ash Wednesday.</i>
11	Th	Mr. Gladstone's Irish University Bill rejected, 1873.
12	F	Discussion in the House of Commons on "Soudan," "Russia and India," and
13	S	Battle of Tamanieb (Soudan), 1884. ["German Colonisation," 1885.
14	S	<i>1 Sunday in Lent. M.L.</i> —Gen. 19 v. 12 to 30, Mark 11 v. 27 to 12 v. 13; <i>E.L.</i> —Gen. 22
15	M	Explosion at Local Government Office, 1883. [to v. 20 or 23, 1 Cor. 7 to v. 25.
16	Tu	Alliance at Vienna, 1731.
17	W	Petition of Rights, 1627-8.
18	Th	Insurrection at Berlin, 1848.
19	F	Lucknow taken 1858.
20	S	House of Lords: Opening of Museums on Sunday: 64 <i>pro</i> and 64 <i>con</i> .
21	S	<i>2 Sunday in Lent. M.L.</i> —Gen. 27 to v. 41, Mark 15 to v. 42; <i>E.L.</i> —Gen. 28 or 32,
22	M	William Emperor of Germany, born 1797. [1 Cor. 12 to v. 28.
23	Tu	Col. C. S. Gordon takes Chang-Chow-Foo, 1864.
24	W	English and Scotch Crown united, 1603.
25	Th	Lady Day.
26	F	First Printing in England, 1471.
27	S	Peace of Amiens, 1802.
28	S	<i>3 Sunday in Lent. M.L.</i> —Gen. 37, Luke 3 to v. 23; <i>E.L.</i> —Gen. 39 or 40, 2 Cor. 1 to v.
29	M	Agricultural Labourers' Union founded, 1872. [23.
30	Tu	Treaty of Peace at Paris, 1856.
31	W	Spaniards bombard Valparaiso, 1866.

1	TH	Prince Bismarck born, 1815.
2	F	Richard Cobden died, 1865.
3	S	End of siege of Puebla, 1863.
4	S	4 Sunday in Lent. <i>M.L.</i> —Gen. 42, Luke 7 to v. 24; <i>E.L.</i> —Gen. 43 or 45, 2 Cor. 8.
5	M	Napoleon abdicated, 1814.
6	Tu	Khyber Pass forced, 1842.
7	W	William Pitt's protest against the Independence of America, 1778.
8	TH	Convention at St. Petersburg, 1805.
9	F	Clark v. Bradlaugh: House of Lords finds for defendant, 1883.
10	S	Chartist Demonstration, 1848.
11	S	5 Sunday in Lent. <i>M.L.</i> —Exod. 3, Luke 10 v. 17; <i>E.L.</i> —Exod. 5 or 6 to v. 14, Gal. 2.
12	M	Lord Rodney's naval victory, 1782.
13	Tu	Catholic Emancipation in England, 1829.
14	W	General Komaroff attacks the Afghans at Ak Tepé, 1885.
15	TH	President Lincoln shot, 1865.
16	F	University of Edinburgh founded, 1584.
17	S	Luther at the Diet of Worms, 1521.
18	S	6 Sunday in Lent. <i>M.L.</i> —Exod. 9, Mat. 26; <i>E.L.</i> —Exod. 10 or 11, Luke 19 v. 28 or 20 [v. 9 to 21].
19	M	Skye Crofters agitation began, 1883.
20	Tu	Cromwell dissolves the Long Parliament, 1658.
21	W	Hilary Law sittings end.
22	TH	Earthquakes in England, 1884.
23	F	Good Friday.
24	S	Russia declares war against Turkey, 1877.
25	S	Easter Day. <i>M.L.</i> —Exod. 12 to v. 29, Rev. 1 v. 10 to 19; <i>E.L.</i> —Exod. 12 v. 29 or 14, [John 20 v. 11 to 19 or Rev. 5.
26	M	Easter Monday. Bank Holiday.
27	Tu	Irish Convention at Philadelphia, 1883.
28	W	Mr. Gladstone's second cabinet formed, 1880.
29	TH	Battle of Orleans, 1429.
30	F	Foundation stone of London University laid, 1827.

MAY, 1886.

1	S	First Exhibition opened, 1851.
2	S	1 Sunday after Easter. <i>M.L.</i> —Num. 16 to v. 36, 1 Cor. 15 to v. 29; <i>E.L.</i> —Num. 16 v. 36 or 17 to v. 12, John 20 v. 24 to 30.
3	M	Bank Holiday, Scotland.
4	Tu	Easter Law Sittings begin.
5	W	Napoleon died, 1821.
6	TH	Lord Cavendish and Mr. Burke murdered in Phoenix Park, 1882.
7	F	Army Estimates introduced, 1885.
8	S	Charles II. came to the throne, 1660.
9	S	2 Sunday after Easter. <i>M.L.</i> —Num. 20 to v. 14, John 1 to v. 29; <i>E.L.</i> —Num. 20 v. 14 [to 21 v. 10, or 21 v. 10, 2 Thess. 1.
10	M	Sepoys conspiracy in India, 1857.
11	Tu	"Claim of Right" accepted by William and Mary, 1689.
12	W	Pacific Railroad opened, 1869.
13	TH	Sir Henry James Attorney-General, 1880.
14	F	Henry IV. of France murdered, 1610.
15	S	Redistribution Bill read second time in the Lords, 1885.
16	S	3 Sunday after Easter. <i>M.L.</i> —Num. 22, John 5 to v. 24; <i>E.L.</i> —Num. 23 or 24, 1 Tim. 5.
17	M	Athens taken by the Turks, 1827.
18	Tu	Parliamentary Oaths abolished, 1866.
19	W	Revised version of the Old Testament published, 1885.
20	TH	Colombus died, 1506.
21	F	Battle of Aspern, 1809.
22	S	Constantine the Great died, 323. Mungo Park's first expedition, 1725.
23	S	4 Sunday after Easter. <i>M.L.</i> —Deut. 4 to v. 23, John 8 to v. 31; <i>E.L.</i> —Deut. 4 v. 23 to [41 or 5, Titus 2.
24	M	Queen Victoria born, 1819.
25	Tu	Bank Holidays Act, 1871.
26	W	Landing of the Guards at Suakin from Alexandria, 1885.
27	TH	Habeas Corpus Act passed, 1679.
28	F	Petition of Rights, 1628.
29	S	English Monarchy re-established: Charles II., 1660.
30	S	5 S. aft. Easter. <i>M.L.</i> —Deut. 8, John 11 v. 47 to 12 v. 20; <i>E.L.</i> —Deut. 9 or 10, Heb. 6.
31	M	Irish Church Disendowment Bill passed, 1869.

1	Tu	Prince Imperial killed, 1879.
2	W	Rogation Day.
3	Th	Ascension Day.
4	F	Proposal for impeachment of M. Jules Ferry rejected by 322 to 153 votes.
5	S	Battle at Wagram, 1809.
6	S	<i>Sunday after Ascension. M.L.—Deut. 30, John 16 v. 16; E.L.—Deut. 34 or Joshua 1, [Heb. 11 v. 17]</i>
7	M	Reform Bill passed, 1832.
8	Tu	Defeat of the Gladstone Government, 1885.
9	W	Foundation stone of German Parliament House laid, 1884.
10	Th	Political crisis. Lord Salisbury summoned to Balmoral, 1885.
11	F	Cade's insurrection, 1450.
12	S	Acceptance of resignation of the Government by the Queen announced, 1885.
13	S	<i>Whit-Sunday. M.L.—Deut. 16 to v. 18, Rom. 8 to v. 18; E.L.—Isa. 11 or Ezek. 36 v. 25, [Gal. 5 v. 16 or Acts 18 v. 24]</i>
14	M	<i>Whit-Monday. Bank Holiday.</i>
15	Tu	Lord Salisbury undertakes to form a cabinet, 1885.
16	W	Battle of Dettingen, 1743.
17	Th	Battle at Bunker's Hill, 1775.
18	F	Battle of Waterloo, 1815.
19	S	Magna Charta signed, 1215.
20	S	<i>Trinity Sunday. M.L.—Isa. 6 to v. 11, Rev. 1 to v. 9; E.L.—Gen. 18 or 1 & 2 to v. 4 [Eph. 4 to v. 17 or Mat. 3]</i>
21	M	Factory Act passed, 1860.
22	Tu	Trinity Law Sittings begin.
23	W	Marquis of Salisbury's acceptance of office, 1885.
24	Th	Quarter Day.
25	F	Isabella of Spain abdicates, 1870.
26	S	Corn Laws repealed, 1846.
27	S	<i>1 Sunday after Trinity. M.L.—Joshua 3 v. 7 to 4 v. 15, Acts 8 v. 5 to 26; E.L.—Joshua 5 [v. 13 to 6 v. 21 or 24, 1 John 2 v. 25]</i>
28	M	Queen Victoria crowned, 1838.
29	Tu	The Hanoverians surrender to the Prussians, 1866.
30	W	First Chinese Railway, 1876.

1	Th	General Todleben died, 1884.
2	F	President Garfield shot, 1881.
3	S	Battle of Sadowa (Königgrätz) 1866.
4	S	<i>2 Sunday after Trinity. M.L.—Judges 4, Acts 11; E.L.—Judges 5 or 6 v. 11, 3 John</i>
5	M	Star Chamber abolished, 1684.
6	Tu	Battle of Novi Bazar, 1876.
7	W	Peace of Tilsit, 1807.
8	Th	Battle of Pultowa, 1708.
9	F	Erzeroum taken by the Russians, 1829.
10	S	William the Silent murdered, 1584.
11	S	<i>3 Sunday after Trinity. M.L.—1 Sam. 2 to v. 27, Acts 16 v. 16; E.L.—1 Sam. 3 or [1 Sam. 4 to v. 19, Mat. 5 v. 13 to 33]</i>
12	M	Acre taken by Crusaders, 1191.
13	Tu	Treaty of Berlin signed 1878.
14	W	Destruction of the Bastille. (Beginning of the Revolution), 1789.
15	Th	First Railway in Canada opened, 1836.
16	F	Mahomed fled to Medina (The Hegira), 622.
17	S	Lords refuse compromise on Franchise Bill, 1884.
18	S	<i>4 Sunday after Trinity. M.L.—1 Sam. 12, Acts 20 v. 17; 1 Sam. 13 or Ruth 1, Mat. 9 [to v. 18]</i>
19	M	Spanish Armada passes Cornwall, 1588.
20	Tu	Purchase of Commissions in the Army abolished, 1871.
21	W	Great Hyde Park Meeting, 1884.
22	Th	Battle of Falkirk, 1298.
23	F	Jews admitted to Parliament, 1858.
24	S	Army discipline and Regulation Acts passed, 1879.
25	S	<i>5 Sunday after Trinity. M.L.—1 Sam. 15 to v. 24; E.L.—1 Sam. 16 or 17, Mat. 13 [to v. 24]</i>
26	M	Wade forces the Khyber Pass, 1839.
27	Tu	Bank of England incorporated, 1694.
28	W	The Powers sanction the Egyptian Loan of £9,000,000, 1885.
29	Th	New Toleration Act, 1820.
30	F	Sixpenny Telegram Bill passed, 1885.
31	S	Criminal Law Amendment Bill passed, 1885.

1	S	6 Sunday after Trinity. <i>M.L.</i> —2 Sam. 1, Rom. 2 to v. 17; <i>E.L.</i> —2 Sam. 12 to v. 24 or [18, Mat. 16 v. 24 to 17 v. 14.
2	M	Bank Holiday.
3	Tu	Edward III. takes Calais, 1347.
4	W	Great Reform Demonstration at Birmingham, 1884.
5	Th	First Cable Telegram from the Queen to the President United States of America, 1858.
6	F	Bolivia declares its Independence, 1824.
7	S	Meeting of the Emperors of Austria and Germany at Gastein, 1885.
8	S	7 Sunday after Trinity. <i>M.L.</i> —1 Chron. 21, Rom. 8 to v. 18; <i>E.L.</i> —1 Chron. 22, or [1 Chron. 28 to v. 21, Mat. 21 to v. 23.
9	M	Revolution at Lisbon, 1836.
10	Tu	Rt. Hon. G. J. Goschen born, 1831.
11	W	Half-Quarter Day.
12	Th	George Stephenson died, 1848.
13	F	University of Heidelberg refuses the admission of Women, 1884.
14	S	Crimes Act (Ireland) expired, 1885.
15	S	8 Sunday after Trinity. <i>M.L.</i> —1 Chron. 29 v. 9 to 29, Rom. 12; <i>E.L.</i> —2 Chron. 1 or [1 Kings 3, Mat. 24 v. 29.
16	M	Gas introduced in London, 1805.
17	Tu	Marriage and Registry Act passed, 1863.
18	W	Battle of Gravelotte, 1870.
19	Th	Naval battle off Carthage between English and French, 1702.
20	F	Riot at Belfast, 1872.
21	S	Battle of Vimeira, 1808.
22	S	9 Sunday after Trinity. <i>M.L.</i> —1 Kings 10 to v. 25, 1 Cor. 3; 1 Kings 11 to v. 15 or [1 Kings 11 v. 26, Mat. 27 v. 27 to 57.
23	M	Treaty of Prague, 1866.
24	Tu	Ejection of Nonconformists, 1662.
25	W	Revolution at Brussels, 1830.
26	Th	Battle of Cressy, 1346.
27	F	Julius Cæsar landed, B.C. 55.
28	S	Habeas Corpus Act suspended, 1799.
29	S	10 Sunday after Trinity. <i>M.L.</i> —1 Kings 12, 1 Cor. 9; <i>E.L.</i> —1 Kings 13 or 1 Kings 17, [Mark 3 v. 13.
30	M	Demonstrations in Spain in respect of the Caroline Islands, 1885.
31	Tu	Red River disturbances suppressed, 1870.

SEPTEMBER, 1886.

1	W	First Railway in Persia begun, 1866.
2	Th	Battle of Sedan, 1870.
3	F	Employers' Liability Bill passed, 1880.
4	S	French Republic proclaimed, 1870.
5	S	11 Sunday after Trinity. 1 Kings 18, 1 Cor. 14 v. 20; <i>E.L.</i> —1 Kings 19 or 21, Mark 7 [to v. 24.
6	M	Mayflower left Plymouth, 1620.
7	Tu	New style (Calendar) introduced, 1752.
8	W	Northern Pacific Railroad opened, 1883.
9	Th	Corporation Reform Act passed, 1835.
10	F	Lord Dufferin, Viceroy of India, 1885.
11	S	Battle of Malplaquet, 1709.
12	S	12 Sunday after Trinity. <i>M.L.</i> —1 Kings 22 to v. 41, 2 Cor. 4; <i>E.L.</i> —2 Kings 2 to v. 16 [or 4 v. 8 to 38, Mark 11 to v. 27.
13	M	Battle at Tel-el-Kebir, 1882.
14	Tu	Moscow burnt, 1812.
15	W	Congress at Skierniewice, 1884.
16	Th	First Government founded in California, 1847.
17	F	Insurrection at Cadiz, 1868.
18	S	Revolution in Eastern Roumelia, 1885.
19	S	13 Sunday after Trinity. 2 Kings 5, 2 Cor. 11 to v. 30; <i>E.L.</i> —2 Kings 6 to v. 24 or 7, [Mark 14 v. 53.
20	M	Italians enter Rome, 1870.
21	Tu	Sir Walter Scott died, 1832.
22	W	Mobilisation of Bulgarian and Servian troops, 1885.
23	Th	Prince Bismarck made Minister, 1862.
24	F	Siege of Paris, 1870.
25	S	
26	S	14 Sunday after Trinity. <i>M.L.</i> —2 Kings 9, Gal. 4 v. 21 to 5 v. 13; <i>E.L.</i> —2 Kings 10 to [v. 32 or 13, Luke 2 v. 21.
27	M	"Society of Jesus," formed 1540.
28	Tu	M. Clémenceau born, 1841.
29	W	Quarter Day.
30	Th	Protectorate over Bechuanaland proclaimed, 1885.

1	F	Sixpenny Telegrams introduced, 1885.
2	S	General Türr and committee propose a Canal at Panama, 1876.
3	S	15 <i>Sunday after Trinity</i> . <i>M.L.</i> —2 Kings 18, Eph. 4 to v. 25; <i>M.L.</i> —2 Kings 19 or 23
4	M	Colonel Steward massacred at Wady Gama, 1884. [to v. 31, Luke 6 to v. 20.]
5	Tu	Meeting of Ambassadors at Constantinople, 1885.
6	W	Inner Circle Metropolitan Railway completed, 1884.
7	Th	The British enter France, 1813. Peace at Aix-la-Chapelle, 1648.
8	F	Memorial service in Westminster Abbey in honour of Earl of Shaftesbury, 1885.
9	S	Rome united to Italy, 1870.
10	S	16 <i>Sunday after Trinity</i> . <i>M.L.</i> —2 Chron. 36, Phil. 4; <i>E.L.</i> —Neh. 1 & 2 to v. 9 or 8,
11	M	Last day of fire at Chicago, 1871. [Luke 9 v. 28 to 31.]
12	Tu	Freedom of religious worship in Spain, 1868.
13	W	Great Conservative Demonstration at Birmingham, 1884.
14	Th	Battle of Hastings, 1066.
15	F	Napoleon arrived at St. Helena, 1815.
16	S	Field Marshal Lord Strathnairn died, 1885.
17	S	17 <i>Sunday after Trinity</i> . <i>M.L.</i> —Jer. 5, 1 Thess. 2; <i>E.L.</i> —Jer. 22 or 35, Luke 13 to v.
18	M	Battle of Leipzig, 1813. [18.]
19	Tu	Abdication of Yakooob Khan (Afghanistan), 1879.
20	W	Amadeus accepts offer to be King of Spain, 1870.
21	Th	Battle at Trafalgar, 1805.
22	F	Revocation of the Edict of Nantes, 1685.
23	S	Sir Michael Hicks-Beach born, 1837.
24	S	18 <i>Sunday after Trinity</i> . <i>M.L.</i> —Jer. 36, 1 Tim. 1 to v. 18; <i>E.L.</i> —Ezek. 2 or 13 to v. 17,
25	M	Michaelmas Law Sittings begin. [Luke 17 v. 2.]
26	Tu	Great Franchise Demonstration in Hyde Park, 1884.
27	W	Earl of Idlesleigh born, 1818.
28	Th	New Royal Exchange opened by the Queen, 1844.
29	F	The British retake Buenos Ayres, 1806.
30	S	Napoleon at Strasburg, 1836.
31	S	19 <i>Sunday after Trinity</i> . <i>M.L.</i> —Ezek. 14, 2 Tim. 2; <i>E.L.</i> —Ezek. 18 or 24 v. 15, Luke 21 [v. 5.]

NOVEMBER, 1886.

1	M	All Saints' Day.
2	Tu	London School Board Election, 1885.
3	W	Garibaldi defeated at Mentana, 1867.
4	Th	Chinese Fleet destroyed by Sir M. Seymour, 1856.
5	F	Gunpowder Plot, 1605.
6	S	Mr. Fawcett, M.P., died 1884.
7	S	20 <i>Sunday after Trinity</i> . <i>M.L.</i> —Ezek. 34, Philemon; <i>E.L.</i> —Ezek. 37 or Daniel 1.
8	M	John Milton died, 1674. [Luke 23 v. 50 to 24 v. 13.]
9	Tu	Prince of Wales born 1841.
10	W	Dr. Carpenter died, 1885.
11	Th	Half-Quarter Day.
12	F	Grand Trunk Railway, Quebec, Toronto, opened, 1856.
13	S	England and United States Convention, 1826.
14	S	21 <i>Sunday after Trinity</i> . <i>M.L.</i> —Dan. 3, Heb. 8; <i>E.L.</i> —Dan. 4 or 5, John 4 to v. 31.
15	M	Mr. Gladstone elected Lord Rector of Glasgow University, 1877.
16	Tu	Hostilities against Burmah, commenced 1855.
17	W	Inauguration of the Suez Canal, 1869.
18	Th	Parliament dissolved, 1885.
19	F	M. de Lesseps born, 1805.
20	S	First Chinese Embassy in London, 1868.
21	S	22 <i>Sunday after Trinity</i> . <i>M.L.</i> —Eccles. 11 & 12, Heb. 13; <i>E.L.</i> —Hag. 2 to v. 10 or
22	M	Death of Clive, 1774. [Mal. 3 & 4, John 7 to v. 25.]
23	Tu	General election of 1885 began.
24	W	The Pope fled to Gaëta, 1848.
25	Th	Alfonso XII., of Spain, died 1885.
26	F	Marshal Serrano died 1885.
27	S	Mr. Gladstone returned for Midlothian, 1885.
28	S	1 <i>Sunday in Advent</i> . <i>M.L.</i> —Isaiah 1, 1 Peter 1 v. 22 to 2 v. 11; <i>E.L.</i> —Isaiah 2 or 4 v. 2,
29	M	First London School Board elected, 1870. [John 11 to v. 17.]
30	Tu	King of Burmah surrendered, 1885.

1	W	Princess of Wales born, 1844.
2	TH	Coup d'Etat, 1851.
3	F	Trial of Arabi Pasha, 1882.
4	S	Queensland made a Province, 1859.
5	S	2 Sunday in Advent. <i>M.L.</i> —Isaiah 5, 2 Peter 2; <i>E.L.</i> —Isaiah 11 to v. 11 or 24, John 14.
6	M	Franchise Bill became law, 1885.
7	TU	Formation of the Australasian Federal Council, 1883.
8	W	National Conference on the Eastern Question, 1875.
9	TH	Mr. Gladstone Premier for the first time, 1868.
10	F	Persians defeated by the English at Bushire, 1856.
11	S	James II. fled from England, 1688.
12	S	3 Sunday in Advent. <i>M.L.</i> —Isaiah 25, 1 John 4 v. 7; <i>E.L.</i> —Isaiah 26 or 28 v. 5 to 19 John 19 to v. 25
13	M	Dynamite outrage at London Bridge, 1884.
14	TU	Prince Consort died, 1861.
15	W	Dr. Howson, Dean of Chester, died, 1885.
16	TH	Oliver Cromwell Lord Protector, 1653.
17	F	Vera Cruz surrenders to the Spanish, 1861.
18	S	Slavery abolished, United States, America, 1862.
19	S	4 Sunday in Advent. <i>M.L.</i> —Isai. 30 to v. 27, Rev. 4; <i>E.L.</i> —Isaiah 32 or 33 v. 2 to v. 23, Rev. 5.
20	M	Louis Napoleon, President of the French Republic, 1848.
21	TU	Sleswig Holstein annexed to Germany, 1863.
22	W	Part of New Guinea and New Ireland annexed by Germany, 1884.
23	TH	Principality of Roumania founded, 1861.
24	F	Debate on the Tonquin Credits: vote of confidence in Government carried by 4 votes, 1885.
25	S	Christmas Day.
26	S	1 Sunday after Christmas. <i>M.L.</i> —Isa. 35 (Gen. 4 to v. 11), Acts 6; <i>E.L.</i> —Isa. 33 or 40 (2 Chron. 24 v. 15 to 23), Acts 8 to v. 9.
27	M	Bank Holiday.
28	TU	Lord Macaulay born, 1809.
29	W	Right Hon. W. E. Gladstone born, 1809.
30	TH	Sir H. Stewart advances from Korto, and General Earle from Abu Hamah, 1884.
31	F	Gambetta died, 1882.

JANUARY, 1887.

1	S.	Union of Ireland with Great Britain, 1801. Burmah annexed, 1886.
2	S	2 Sunday after Christmas. <i>M. L.</i> —Isa. 42, Mat. 1 v. 18; <i>E. L.</i> —Isa. 43 or 44, Acts 1.
3	M	Five M.P.s impeached, 1642.
4	TU	Triple Alliance, 1717.
5	W	Extradition Treaty between Great Britain and Italy, 1873.
6	TH	Epiphany.
7	F	French Army lands at Vera Cruz, 1862.
8	S	British attack New Orleans, 1815.
9	S	1 Sunday after Epiphany. <i>M. L.</i> —Isa. 51, Mat. 5 v. 33; <i>E. L.</i> —Isa. 52, v. 13 & 53 or 54, [Acts 5 v. 17.
10	M	Royal Exchange burnt, 1838.
11	TU	General Gordon accepted the offer of the King of the Belgians to go to the Congo, 1884.
12	W	Napoleonists banished from France by law, 1816.
13	TH	Greece declared independent, 1822.
14	F	Convention conceding Alabama Claims signed, 1869.
15	S	Battle of Belfort, 1871.
16	S	2 Sunday after Epiphany. <i>M. L.</i> —Isa. 55, Mat. 9 v. 18; <i>E. L.</i> —Isa. 57 or 61, Acts 9
17	M	Sir H. Stewart defeats the Soudanese rebels, 1885. Col. Burnaby killed. [v. 23.
18	TU	General Gordon starts for Egypt, 1884.
19	W	Queen opened Parliament, 1886.
20	TH	Charles I.'s trial, 1649.
21	F	Louis XVI. beheaded, 1793.
22	S	Fredericton taken by Americans, 1813.
23	S	3 Sunday after Epiphany. <i>M. L.</i> —Isa. 62, Mat. 13, v. 24 to v. 53; <i>E. L.</i> —Isa. 65 or 66, [Acts 14.
24	M	Chinese Embassy at Paris received by the Emperor Napoleon, 1869.
25	TU	Mr. Collings' amendment to the Address carried (329 votes to 250), 1886.
26	W	Fall of Khartoum. General Gordon killed, 1885.
27	TH	Lord Ripon welcomed home, 1885.
28	F	Charles the Great, 1814. Capitulation of Paris, 1871.
29	S	George IV.'s accession, 1820.
30	S	4 Sunday after Epiphany. <i>M. L.</i> —Job 27, Mat. 16 v. 24 to 17, v. 14; <i>E. L.</i> —Job 28 or XXXIX. Articles subscribed, 1562.
31	M	[29, Acts 18 to v. 24.

1	TU	The non-juring Bishops deprived, 1691.
2	W	Ilbert Bill introduced in Calcutta, 1863.
3	TH	Marquis of Salisbury born, 1830.
4	F	Baker Pasha's force routed, 1884.
5	S	Thomas Carlyle died, 1881.
6	S	<i>Septuagesima. M. L.</i> —Gen. 1 and 2 to v. 4, Rev. 21 to v. 9; <i>E. L.</i> —Gen. 2 v. 4, or Job
7	M	Battle of Eylau, 1807. [38, Rev. 21 v. 9 to 22 v. 6.
8	TU	West End Riots, 1886.
9	W	Panic in London in consequence of Riots, 1886.
10	TH	Queen Victoria married, 1840.
11	F	King Amadeus' abdication, 1873.
12	S	First Government founded in Australia, 1851, by E. Hargraves.
13	S	<i>Sexagesima. M. L.</i> —Gen. 3, Matt. 24 v. 29; <i>E. L.</i> —Gen. 6 or 8, Acts 27 v. 18.
14	M	Battle of Cape St. Vincent, 1797.
15	TU	Death of Lord Cardwell, 1886.
16	W	Death of Sir H. Stewart at Gakdul, 1885.
17	TH	First vessel (a small one) passed Suez Canal, 1865.
18	F	Riots at Cairo against Nubar Pasha, 1879.
19	S	Parliament reassembled, 1885.
20	S	<i>Quinquagesima. M. L.</i> —Gen. 9 to v. 20, Matt. 27 v. 27 to 57; <i>E. L.</i> —Gen. 12 or 13,
21	M	Mr. Disraeli Premier (the second time), 1874. [Rom. 4.
22	TU	<i>Shrove Tuesday.</i>
23	W	<i>Ash Wednesday.</i>
24	TH	Clôture rule first applied. 1885.
25	F	Treaty of Vienna, 1815.
26	S	Franchise Bill introduced by Mr. Gladstone, 1884.
27	S	<i>1 Sunday in Lent. M. L.</i> —Gen. 19 v. 12 to v. 30, Mark 3 v. 13; <i>E. L.</i> —Gen. 22 to v. 20
28	M	End of Carlist War in Spain, 1876. [or 23, Rom. 7.

POSTAL INFORMATION.

Letters.—Inland.—Not exceeding 1 oz. 1d.; 2 oz. 1½d., and for all greater weights 4d. additional for every 2 oz.—thus, a packet weighing over 22 oz. and under 24 oz. will be liable to a postage of 7d., and so on. No letter packet may exceed 18 in. by 9 in. by 6 in.

Post Cards.—Inland.—Thin 7d., thick 8d. per dozen, or singly at ¾d. each, either sort. Nothing may appear on the stamped side but the address, nor may anything be attached front or back, under penalty of 1d. on delivery.

Post Cards.—Foreign.—1d., 1½d., and 2d. each, may be sent to all countries in the Postal Union; the rate varying according to destination.

Reply Post Cards, for use in United Kingdom, and to most countries in the Postal Union, are issued at double the cost of ordinary post cards.

Wrappers, for enclosing newspapers and book packets, are issued, bearing stamps of the value of ¼d. and 1d., and are sold in bundles of 7 half-penny ones for 4d. and 8 penny ones at 8½d., or singly at ¾d. and 1½d. each.

Registration.—The fee for letters, book packets, newspapers, etc., is 2d. This must be prepaid in stamps in addition to the ordinary postage, and a receipt obtained from the Post Office. Registered packets must be enclosed in strong envelopes securely fastened, and those containing coin must be enclosed in special stamped envelopes, which are sold at all post offices in five sizes.

Newspapers.—Registered Newspapers (i.e., those having paid a fee of 5s. for transmission at the newspaper rate) may be sent to any part

of the United Kingdom at a uniform rate of ¼d. for every 2 oz. The packet must be made up without a cover, or in a cover open at ends, and so that the contents can easily be examined; be fully prepaid, and contain no writing but the address. No packet may exceed 14 lb. in weight, 2 ft. in length, or 1 ft. in width or depth. Unregistered newspapers are subject to book postage.

Book Packets.—Inland.—May not exceed 5 lb. in weight, 1 ft. 6 in. in length, 9 in. wide, and 6 in. in depth. Ends must be left open, and must be prepaid in stamps at the rate of ¼d. for every 2 oz. or fraction of same. If insufficiently prepaid, will be charged with double the deficiency, but any packet which bears no stamps will be charged double postage. A Book Packet may consist of any number of separate books, newspapers, magazines, circulars, invoices, maps, photographs (not on glass), or prints, and any quantity of paper, vellum, or parchment, or any legitimate binding, covering, or mounting, fixed or detached, necessary either to their safe transit or naturally pertaining to them (to the exclusion of letters, or any communication of the nature of a letter), and the books, maps, papers, etc., may be printed, written, or plain. Printed Circulars, in identical terms, may also be sent by book post.

Book Packets.—Foreign.—The regulations are in most cases the same as for Inland, but the limits of weight and size are not the same.

[Full information concerning Money Orders, Postal Orders, Post Office Investments, Insurances, and Annuities, will be found under their respective headings in the text.]

REFERENCE CALENDAR FOR THE NINETEENTH CENTURY

For finding any Day of the Week for any given time within the Present Century. See Key.

Years 1801 to 1900.

											31 Jan.	28 Feb.	31 Mar.	30 Apr.	31 May	30 June	31 July	31 Aug.	30 Sept.	31 Oct.
1801	1807	1818	1829	1835	1846	1857	1863	1874	1885	1891	4	7	7	3	5	1	3	6	2	4
1802	1813	1819	1830	1841	1847	1858	1869	1875	1886	1897	5	1	1	4	6	2	4	7	3	5
1803	1814	1825	1831	1842	1853	1859	1870	1881	1887	1898	6	2	2	5	7	3	5	1	4	6
1805	1811	1822	1833	1839	1850	1861	1867	1878	1889	1895	2	5	5	1	3	6	1	4	7	2
1806	1817	1823	1834	1845	1851	1862	1873	1879	1890	—	3	6	6	2	4	7	2	5	1	3
1809	1815	1826	1837	1843	1854	1865	1871	1882	1893	1899	7	3	3	6	1	4	6	2	5	7
1810	1812	1827	1838	1849	1855	1866	1877	1883	1894	—	1	4	4	7	2	5	7	3	6	1

EXPLANATORY KEY.

In order to ascertain any day of the week in any year of the present century, first look in the table of years for the year required. Under the months are figures which refer to the corresponding figures at the head of the columns of days below. *For Example* :—To know what day of the week May 3rd will be on in the year 1878, in the table of years look for 1878, and in a parallel line, under May, is fig. 3, which directs to column 3, by which it will be seen that May 3rd falls on a Friday.

LEAP YEARS.

					29															
1804	1832	1860	1888	7	3	4	7	2	5	7	3	6	1	4	2	5	1	3	6	1
1808	1836	1864	1892	5	1	2	5	7	3	5	1	4	6	2	4	7	3	5	1	3
1812	1840	1868	1896	3	6	7	3	5	1	3	6	2	4	7	2	5	1	3	6	1
1816	1844	1872	1900	1	4	5	1	3	6	1	4	7	2	5	1	3	6	1	4	2
1820	1848	1876	—	6	2	3	6	1	4	6	2	5	7	3	5	1	3	6	1	4
1824	1852	1880	—	4	7	1	4	6	2	4	7	3	5	1	3	6	1	4	2	5
1828	1856	1884	—	2	5	6	2	4	7	2	5	1	3	6	1	4	2	5	1	3

1	2	3	4	5	6	7
Monday 1	Tuesday 1	Wednesday 1	Thursday 1	Friday 1	Saturday 1	SUNDAY 1
Tuesday 2	Wednesday 2	Thursday 2	Friday 2	Saturday 2	SUNDAY 2	Monday 2
Wednesday 3	Thursday 3	Friday 3	Saturday 3	SUNDAY 3	Monday 3	Tuesday 3
Thursday 4	Friday 4	Saturday 4	SUNDAY 4	Monday 4	Tuesday 4	Wednesday 4
Friday 5	Saturday 5	SUNDAY 5	Monday 5	Tuesday 5	Wednesday 5	Thursday 5
Saturday 6	SUNDAY 6	Monday 6	Tuesday 6	Wednesday 6	Thursday 6	Friday 6
SUNDAY 7	Monday 7	Tuesday 7	Wednesday 7	Thursday 7	Friday 7	Saturday 7
Monday 8	Tuesday 8	Wednesday 8	Thursday 8	Friday 8	Saturday 8	SUNDAY 8
Tuesday 9	Wednesday 9	Thursday 9	Friday 9	Saturday 9	SUNDAY 9	Monday 9
Wednesday 10	Thursday 10	Friday 10	Saturday 10	SUNDAY 10	Monday 10	Tuesday 10
Thursday 11	Friday 11	Saturday 11	SUNDAY 11	Monday 11	Tuesday 11	Wednesday 11
Friday 12	Saturday 12	SUNDAY 12	Monday 12	Tuesday 12	Wednesday 12	Thursday 12
Saturday 13	SUNDAY 13	Monday 13	Tuesday 13	Wednesday 13	Thursday 13	Friday 13
SUNDAY 14	Monday 14	Tuesday 14	Wednesday 14	Thursday 14	Friday 14	Saturday 14
Monday 15	Tuesday 15	Wednesday 15	Thursday 15	Friday 15	Saturday 15	SUNDAY 15
Tuesday 16	Wednesday 16	Thursday 16	Friday 16	Saturday 16	SUNDAY 16	Monday 16
Wednesday 17	Thursday 17	Friday 17	Saturday 17	SUNDAY 17	Monday 17	Tuesday 17
Thursday 18	Friday 18	Saturday 18	SUNDAY 18	Monday 18	Tuesday 18	Wednesday 18
Friday 19	Saturday 19	SUNDAY 19	Monday 19	Tuesday 19	Wednesday 19	Thursday 19
Saturday 20	SUNDAY 20	Monday 20	Tuesday 20	Wednesday 20	Thursday 20	Friday 20
SUNDAY 21	Monday 21	Tuesday 21	Wednesday 21	Thursday 21	Friday 21	Saturday 21
Monday 22	Tuesday 22	Wednesday 22	Thursday 22	Friday 22	Saturday 22	SUNDAY 22
Tuesday 23	Wednesday 23	Thursday 23	Friday 23	Saturday 23	SUNDAY 23	Monday 23
Wednesday 24	Thursday 24	Friday 24	Saturday 24	SUNDAY 24	Monday 24	Tuesday 24
Thursday 25	Friday 25	Saturday 25	SUNDAY 25	Monday 25	Tuesday 25	Wednesday 25
Friday 26	Saturday 26	SUNDAY 26	Monday 26	Tuesday 26	Wednesday 26	Thursday 26
Saturday 27	SUNDAY 27	Monday 27	Tuesday 27	Wednesday 27	Thursday 27	Friday 27
SUNDAY 28	Monday 28	Tuesday 28	Wednesday 28	Thursday 28	Friday 28	Saturday 28
Monday 29	Tuesday 29	Wednesday 29	Thursday 29	Friday 29	Saturday 29	SUNDAY 29
Tuesday 30	Wednesday 30	Thursday 30	Friday 30	Saturday 30	SUNDAY 30	Monday 30
Wednesday 31	Thursday 31	Friday 31	Saturday 31	SUNDAY 31	Monday 31	Tuesday 31

HAZELL'S ANNUAL CYCLOPÆDIA.

1886.

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[Abe

A. B. C. Sewage Process. See SEWAGE.

Abd-el-Kader. See ALGERIA.

Abduction. The offences comprised under this term may be distinguished as follows. To take away or detain against her will any woman of any age with intent to marry or carnally know her, or with intent to cause her to be married or carnally known by another, and fraudulently with such intent to allure, take away or detain out of the possession and against the will of her father and mother or of any other person having the lawful charge of her, any woman under the age of twenty-one years, and having an interest in property, are crimes each rendering the offender liable to fourteen years' penal servitude. The person convicted becomes incapable of taking any interest in any property belonging to the woman, and if a marriage has taken place the property must be settled as the Chancery Division shall appoint. To take or cause to be taken out of the possession and against the will of her father and mother or any other person having the lawful charge of her, with intent that she should be unlawfully and carnally known by any man, any girl under the age of eighteen, and so to take or cause to be taken, no matter with what intent, any unmarried girl under the age of sixteen years, are crimes each rendering the offender liable to two years' imprisonment with hard labour. This offence in Scotch criminal law is termed **Plagium**. The abduction of a man is called **Kidnapping**. (See Sir James Stephen's "Digest of the Criminal Law," Articles 261 and 262, and the Criminal Law Amendment Act, 1885, § 7.)

Abd-ul-Hamid II. Sultan of Turkey. Is the fourth son of Abd-ul-Mejid; b. August 6th, 1842. He was proclaimed Sultan in succession to his brother Murad V., who was deposed in consequence of his mental incapacity (Aug. 31st, 1876). Under the rule of Abd-ul-Hamid the Ottoman Empire has experienced reverses through her last war with Russia. The results of that conflict, which led to the Treaty of Berlin, 1878 (*q.v.*), are well known, and need not be related here. Since then the Sultan has shown reluctance to carry out reforms, both in Europe and Asia, in accordance with the expressed stipulations contained in the treaty, and in 1879 it was only through pressure put upon him by the English Government that the Porte submitted, and that new pledges were obtained from the Sultan for the speedy and thorough fulfilment of his treaty engagements. In 1884 the Sultan expressed his discontent concerning the proceedings of our agents in Egypt and the Sudan, for the settlement of which Sir Drummond Wolff (*q.v.*) was sent as a special envoy from the British Government (Aug. 1885). The Sultan has acted with great prudence in the recent Bulgarian imbroglio,

calling upon the Powers to appoint a Conference to discuss and determine the crisis.

Abecedarians, a sixteenth-century German anabaptist sect, so called because they, in claiming direct inspiration from God, denied the value of all human learning, and maintained that the knowledge of even the A B C is detrimental to man, since it opens the door to all that which obscures the Divinity and is an obstacle to Divine illumination.

Abercorn, James Hamilton, 2nd Duke of (creat. 1868), was b. 1838. Educated at Harrow and Ch. Ch., Oxford, and succeeded his father the 1st Duke (who was for some time Lord Lieutenant of Ireland) 1885; m. (1869), Lady Mary Anna Curzon, dau. of the 1st Earl Howe; has been a Lord of the Bed-chamber to the Prince of Wales (since 1866); and sat as M.P. for Donegal in the Conservative interest (1866-80). His title of Baron of Paisley was conferred by James I. (1587) on the 3rd son of the Earl of Arran, Duke of Chatelherault, for services to Mary Queen of Scots. He holds his seat in the House of Lords as Viscount Hamilton (creat. 1786).

Abercromby, George Ralph Abercromby, 4th Baron (creat. 1801), was b. 1838. Deputy Lieutenant of Stirling. Mar. the dau. of the 2nd Earl of Camperdown.

Aberdare, Henry Austin Bruce, P.C., 1st Baron (creat. 1873), was b. 1815. He was police magistrate for Merthyr Tydvil and Aberdare (1847-52), when he entered Parliament as Liberal member for Merthyr Tydvil; was Under-Secretary of State for the Home Dept. (1862-64); Vice-President of the Council (1864-66); Home Secretary (1868-73), and Lord President of the Council (1873-74). His career at the Home Office is memorable for his bill for the earlier closing of public-houses. He lost his seat for Merthyr (1868), but in the following year was elected for Renfrewshire, which he continued to represent till his elevation to the peerage.

Aberdeen, John Campbell Hamilton Gordon, P.C., 7th Earl of (creat. 1682), was b. 1847, and succeeded his brother 1870. He was H.M. High Commissioner to the General Assembly of the Church of Scotland (1881). He sits in the House of Lords as Visct. Gordon of Aberdeen (creat. 1814). Appointed Lord Lieutenant of Ireland (1886), by the new Gladstone administration. The 4th Earl was Prime Minister of England (1852-55).

Abergavenny, Wm. Nevill, 1st Marquis of (creat. 1876); son of the 4th Earl (creat. 1784), was b. 1826, and succeeded his father in the earldom 1868. Sir Edward Nevill, who m. the heiress to the feudal barony of Abergavenny, was summoned to parliament in 1450; since which period the title has descended in the male line.

Abingdon, Montague Arthur Bertie, 7th Earl of (creat. 1682), was b. 1876, and succeeded his father 1884. The first Baron was raised to the peerage by Queen Elizabeth in recognition of his services as ambassador at the Court of France.

Abinger, Wm. Fredk. Scarlett, 3rd Baron (creat. 1835), was b. 1826, and succeeded his father 1861. He entered the army (1846); served through the Eastern campaign of 1854-55, including the battles of Alma, Inkermann, and Balaklava, siege of Sebastopol, and sortie of 26th October. The 1st peer (Sir James Scarlett) was a distinguished lawyer, who became Chief Baron of the Exchequer.

About, Edmond François Valentin, b. at Dieuze, Meurthe, 1828. Entered the Lycée Charlemagne, and in 1848 won the *prix d'honneur*. Passed in 1851 to the French college at Athens, where he devoted himself to archaeological studies, making his *début* as an author in "La Grèce Contemporaine" in 1855. The same year he published a novel entitled "Tolla," which led to a bitter controversy and charges of plagiarism against M. About. In 1856 he wrote "Les Mariages de Paris," and in 1857 "Germaine"; but the work with which his name is specially associated, and which excited at the time the most vivid sensation, being supposed to have received its inspirations from the Emperor Louis Napoleon, was "La Question Romaine," in which he advocated, on the ground of the general welfare of Italy, as well as of public policy of the highest order, the extinction of the temporal power of the Papacy. In 1860 two other political pamphlets followed, entitled "The New Map of Europe," and "Prussia in 1860." He continued to write several novels, along with some theatrical works. He was attached to the *Constitutionnel* (French journal) in 1861. Later on he undertook the office of making weekly reports to the emperor as to the state of public opinion; but he abandoned this, and attaching himself to *L'Opinion Nationale*, took up a position of dynastic opposition to the emperor, which drew upon him an "avertissement," or governmental warning. He nevertheless continued on good terms with the court, and received the Cross of the Legion of Honour in 1867. When the war broke out in 1870 he was in Alsace, as collaborateur of the *Soir*. After the fall of the empire, he appears to have lent his advocacy to the Orleans princes; but he finally took the editorship of the *XIXe Siècle* (19th Century) and declared for the republic, to which he continued attached. In September 1872, at Saverne, in Alsace, he was arrested by the German authorities and imprisoned at Strasbourg, on the ground of an article he had written in the *Soir*, claiming for France the right to the restoration of Alsace and Lorraine. He was, however, afterwards released. In a work entitled "Alsace" he has entered into all the details of this matter, adding observations as to the condition of the country, feelings of the people, etc. M. About was for some years the Paris contributor to the pages of the *Athenæum*. He died Feb. 17th, 1885.

Abraham, Mr. W., M.P., at the present time a miner's agent and Deputy Chairman of the Sliding Scale Committee of South Wales, was in early life a working collier. Returned in the Liberal interest as member for Rhondda Division, Glamorgan (1885).

Abraham, Mr. William, M.P., was b. 1840. Engaged in business as a nurseryman. He has taken an active part in the Land League agitation. He was arrested and imprisoned as a suspect (1881). Stood as Nationalist candidate for the chairmanship of the Limerick Board of Guardians. The election, which excited general interest, resulted in the defeat of Lord Emlay and the Whig and Conservative coalition. Returned as a Nationalist for West Limerick (1885).

Absentees. Name applied to Irish landlords who draw rents from Ireland without living in or even visiting the country. Absentees have been denounced in the literature of the Irish Land Question for successive generations; and proposals made to abate the evil. They are mentioned with great severity by Swift in his seventh "Drapier's Letter," and in his "Short View of the State of Ireland"; and in the latter it is stated that one-third of the rents of Ireland were spent in England. Bishop Berkeley also denounces them in his "Querist." In 1730 a list of absentees was published in Dublin and London, and the money annually spent abroad is estimated at £621,499 3s. 1d. In 1769 a list published in Dublin fixes this sum at £1,208,982 14s. 6d. The author of "Commercial Restraints" says: that between 1768 and 1773 the sum transmitted in rents from Ireland to England was £1,100,000 yearly. In 1773 the Viceroy, Lord Harcourt, had a bill introduced in the Irish parliament fixing a tax of 2s. in the £ on absentees; and it was only rejected by 122 votes to 102. In 1782 Mr. Molyneux proposed an absentee tax, but the motion was rejected by 184 votes to 22. Several proposals have since been made, and in 1878 a bill was introduced into the Imperial Parliament, but never printed. Two returns have been made—one in 1872 and the second in 1876. In the latter the absentees are divided into two classes—those "resident usually out of Ireland, but occasionally on property," and those "rarely or never resident in Ireland." The following is the number, acreage and valuation of the two classes:—

	Numb.	Valuation.	Area in Statute Acres.
Resident usually out of Ireland	180	£ 601,072	1,048,341
Rarely or never resident in Ireland	1443	1,538,071	3,145,511
	1623	2,139,143	4,193,861

The valuation is in most instances considerably below the rental—even after the reduction of the land courts; and it is probable that the amount sent out of Ireland in rent to absentee landlords is therefore considerably larger than the total of the valuation, £2,139,143.

Abu Klea. See EGYPT.
Abyssinia. Called *Habesh* by the Turk, *Mokadah* and *Æthiopia* by its inhabitants. A country of North Africa, occupying a highland region S.W. of the Red Sea. Estimated at 150,000 square miles; pop. 3,000,000. Contains the sources of the *Blue Nile*, *Athara*, and *Ma-* rivers, the first of which flows out of *great lake*

Dembea, or **Tsana**, 60 miles by 25. Surface table-lands, 6,000 to 9,000 feet, broken by deep ravines, summits rising to 15,200 feet. Three distinct zones of elevation, roughly to be described as tropical, temperate, and highland. Temperate zone chief scene of industry and habitation. People a mixed race; Semitic or Arabic type most prevalent; colour yellow-brown to black; religion a curious Judaised form of Christianity. There are **Mohamedans**, and **Jews** called **Falashas**. The last profess descent direct from the patriarchs, are exclusive, more moral than the rest of the population, number about 250,000, and are the principal agriculturists and manufacturers of Abyssinia. There is a despised aboriginal race called **Waio** dwelling round Dembea. The country has possessed some civilisation from ancient times, but has retrograded. The families of Mohammed and his partisans took refuge here after the Hegira, and were hospitably received. In the sixteenth century Portuguese colonists obtained a footing, introducing some arts, but not remaining. The fine castellated palace of **Gondar**, the capital, now a ruin, was built by them. In 1866 the tyrant **Lij Kasa**, or **Theodoros**, gained power over the entire country. He imprisoned Englishmen, and a force under **Lord Napier** was sent to chastise him. It reached the fortress of **Magdala**, where a decisive battle was fought (1868), resulting in Theodore's defeat and death. The country is made up of many semi-independent small states, belonging to three great divisions: **Tigre** in the north, **Amhara** central, **Shoa** in the south. After Theodore's death, Prince **Kasa** of Tigre obtained British assistance, and now, as **Johannes II.** (*q.v.*), rules over Tigre and Amhara. Shoa has become independent, under King **Menelik**, who has entered into some relations with European governments. A French embassy and Italian explorers have been warmly received by him. During the Soudan campaign, **Admiral Hewitt** and others visited King Johannes, and an understanding between him and the British Government was arrived at. He sent an army under **General Ras Aloula** to the relief of **Kassala**. A battle was fought at **Kufit**, September 23rd, 1885, when **Oman Digna's** army was broken up by the Abyssinian forces. Manufactures limited to coarse cotton and woollen cloths, leather, pottery, and some iron, steel, and other metal articles. Exports are ivory, gold dust, musk, coffee, and some other productions. Imports are arms, Persian carpets and silks, French velvet and broadcloth, Venetian beads, etc. The language of court and commerce is Amharic. The capital of Shoa is **Ankobar**, and its outlet the Gulf of **Tajurah**. Abyssinian trade passes through **Adowa**, capital of Tigre, to the port of **Massowah**, now occupied by Italy. (Consult **De Cosson's** "Abyssinia.")

"Academy." A weekly review of literature, science, and art (*gd.*); estab. 1869. Its chief characteristic is that the articles are signed by the writers, and it has always devoted a large proportion of its space to branches of unremunerative learning, especially philology and oriental studies. Its founder and first editor was **Dr. O. E. Appleton** (*d.* 1879). Its present editor is **Mr. J. S. Cotton** (*q.v.*)

Accommodation, London School Board. See **SCHOOL BOARD FOR LONDON**.

"Accumulators." See **ELECTRICITY**.

Acland, Mr. Arthur Herbert Dyke, M.P.,

son of **Rt. Hon. Sir Thomas Dyke Acland**, of **Killerton, Exeter**, was b. 1847. Educated at **Rugby** and **Ch. Ch., Oxford**. He is **Steward of Christ Church**, and **Senior Bursar of Balliol College, Oxford**. Returned in the **Liberal** interest as member for **Rotherham Division, West Riding South, Yorkshire** (1885).

Acland, Mr. Charles Thomas Dyke, M.A., M.P., eldest son of **Sir I. Acland, M.P.**, was b. in **London** 1842. Graduated **M.A.** at **Oxford**, and was called to the bar at the **Inner Temple** (1869). He is a **J.P.** for **Devon** and **Somerset**, a **Deputy Lieutenant** for **Somerset**, and **captain 1st Devon Yeomanry Cavalry**. Returned as member for **East Cornwall** in the **Liberal** interest (1882-85), **North-East Cornwall** (1885). Is **Secretary to the Board of Trade** (1886).

Acland, Sir Thomas Dyke, P.C., M.P., was b. 1809. Educated at **Harrow** and **Christ Church, Oxford**. Elected a **Fellow of All Souls Coll.** He is **major 1st Devon Yeomanry Cavalry**, **lieut.-colonel 1st Devon Rifle Volunteers**, and **J.P.** for **Devon** and **Somerset**. Has held the post of **School Inquiry Commissioner** and a **second Church Estates Commissioner**. Returned in the **Liberal** interest as member for **West Somersetshire** (1837-47); **North Devon** (1865-85); **West Somerset** (1885).

Actinotosa. See **ZOOLOGY**.

Act of Union with Ireland. See **HOUSE OF COMMONS**.

Acton, John Emerich Edward Dalberg-Acton, 1st Baron (creat. 1869), was b. at **Naples** 1834, and educated at **Oscott**. **M.P.** for **Carlton Borough** (1859-65), when he was returned for **Bridgenorth**, but unseated on petition.

Addison, Mr. John, Q.C., M.P., **Recorder of Preston**, was b. 1838. Educated at **Preston Gram. Sch.**, and **Trin. Coll., Dublin**. Called to the bar at **Inner Temple** (1862); **Q.C.** (1880); **Bencher of his Inn** (1883). Returned in the **Conservative** interest as member for **Ashton-under-Lyne** (1885).

Addresses to the Crown are from either the **parliament** or the **people**. Both houses regularly move addresses to the crown in answer to the royal speech at the commencement of the session; and the debate on this address has grown into being the formal occasion for expressing approval of or dissatisfaction with the ministerial policy put forward in the royal speech. Addresses from individuals (usually petitions for pardons or for redress of grievances), have been tendered to the monarch from the earliest times, though there seems to have been no precedent for addresses on political points until 1640 (**Charles I.**). This right, limited by an **Act of 1662** against tumultuous petitioning, was confirmed by the **House of Commons** in 1710, when it was voted that petitions to the king from any subject were admissible, "for the calling, sitting, and dissolving parliaments, and for the redressing of grievances." It is still in force.

"Adeler, Max." See **NOMS DE PLUME**.

Aden. See **BRITISH COALING STATIONS**.

Administrations and Ministers of Great Britain, 1868 to 1886. See **APPENDIX**.

Admiralty Courts. The **Court of Admiralty** was erected by **Edward I.** for the trial of maritime causes, and had jurisdiction to try and determine all maritime causes, causes arising wholly upon the sea and not within the boundaries of any county, as well as to decide upon prizes made at sea. From the sentence

of the Admiralty judge an appeal lay at one time to a court known as the Court of Delegates, and at a later time to the sovereign in council. The principles of the law administered by the Court of Admiralty were drawn largely from the civil law and from the laws of foreign maritime powers. By the Judicature Act of 1873 this court was merged in the Probate, Divorce and Admiralty Division of the High Court of Justice. From judgments given in that Division the appeal is firstly to the Court of Appeal and secondly to the House of Lords. In the year 1863 a limited jurisdiction in Admiralty causes was conferred upon the county courts held in the neighbourhood of the sea. The Admiralty Courts are practically confined to hearing civil causes, their criminal jurisdiction having long since become obsolete.

Adowa. See ABYSSINIA.

Adullamites. A term of derision (a simile to the assembly that went to the cave of Adullam, when "every one that was in distress, every one that was in debt, and every one that was discontented, gathered themselves to David") first applied by Mr. John Bright to the forty Liberals who, in 1866, opposed the majority of their party on Earl Russell's new parliamentary reform proposal. Messrs. Robert Lowe (now Lord Sherborne), Horsman, and Lord Elcho were their leaders, and their action resulted in the collapse of Lord Russell's ministry.

Adulteration Acts. These may be classified as follows:—(a) General statutes relating to the adulteration of drugs, food, or drink. This head comprises the **Sale of Food and Drugs Act 1875**, together with the **amending Act 1879**. These Acts prohibit the mixing of food or drugs with injurious ingredients for the purpose of sale, under a penalty not exceeding £50 for the first offence, or six months' imprisonment with hard labour for a subsequent offence. They prohibit the sale of any food or drug not of the quality demanded by the purchaser, under a penalty not exceeding £20. But this provision is subject to certain special exceptions, and to a general exception in favour of the seller who informs the purchaser of the true quality of the article sold. The Act provides for the appointment of public analysts, who upon payment of a small fee are to analyse any article of food or drug submitted to them by a purchaser or by an officer of health, inspector of nuisances, of weights and measures, or of markets, or a police-constable acting under orders of the local authority. The local authority referred to is, in the City of London the Commissioners of Sewers, in the Metropolis a vestry, and elsewhere a town council or a court of quarter sessions. Upon receiving the analyst's certificate showing that an offence against the Act has been committed, the person who caused the analysis to be made may take summary proceedings against the vendor of the defective article. It is no defence that the vendor sold the article as he bought it, unless he had a written warranty that it was such at the time when he bought it, and had no reason to believe that facts were otherwise. It is no defence to say that the article was purchased expressly for analysis. (b) Statutes relating to some particular article of food, etc. Of these the most important is the **Bread Act of 1836**, which punishes the adulteration of bread, corn, meal, or flour. These statutes are numerous, and in parts obsolete. (c) Statutes relating to

the adulteration of seeds. This head comprises the **Act of 1869**, and the **amending Act of 1878**. By these Acts to kill or to dye any seeds, or to sell any seed so killed or dyed, with intent to defraud, is an offence punishable with fine.

Advocate, The Lord, alias King's or Queen's Advocate, is the chief legal officer of the Crown in Scotland. He corresponds to the Attorney-General in England. His earliest functions are obscure, but since the sixteenth century he has filled the post of public prosecutor in Scotland, and that of judge in the Court of Sessions. The duties of Secretary of State for Scotland were transferred to him when the special office was abolished in the reign of George II. In the House of Commons, in which he always—though not *ex officio*—sits, he replies to all Scotch questions and takes charge of all Scotch measures. He has a title of Right Honourable by courtesy, and sits within the bar (otherwise confined to peers of the realm) in the Court of Session. The present Lord Advocate is Mr. J. B. Balfour (Feb. 1886).

Advowsons, Sale of. A system whereby private livings of the Church, and the charge of souls attached thereto, have been treated as open to the biddings of the public in much the same way as ordinary merchandise. Great scandal and injury have consequently resulted to the Church of England. This objectionable traffic is now very limited. The Church has called for the removal of the abuse; and a special commission, appointed to report upon it, has determined upon such regulations with regard to private livings as promise to make them practically unsaleable. By the sale hitherto to the spiritual interests of the people of many parishes have been sacrificed to the private profit of patrons.

Aerial Navigation. See BALLOONING.

Affidavit. A written statement sworn to or affirmed before a person having authority to administer oaths. It must be drawn up in the first person, and divided into paragraphs numbered consecutively and dealing each with a distinct portion of the subject. It must be expressed in distinct and positive terms, so as to afford matter for a charge of perjury if false. When used as evidence in an action it must be confined to statements of fact. When used to support applications merely incidental to the conduct of a suit, it may state the deponent's belief as distinguished from his knowledge, but must give the grounds of such belief. It may be sworn (a) in England, in court or before any one of the judges, or before a commissioner appointed to take affidavits; (b) elsewhere in the Queen's dominions before any person authorised to administer an oath; (c) in foreign countries before a British consul or vice-consul. Evidence may be taken by affidavit in any action in which the parties consent to that course; but then leave to try the case with a jury will generally be refused. (See Foulkes "Action in the Supreme Court.")

Affirmation. The law of England requires an oath to be taken by persons about to discharge various public functions—e.g., a person about to give evidence in a court of justice takes an oath that he will speak the truth; a member of parliament before taking his seat takes the oath of allegiance. But by several statutes beginning with the early part of the reign of William IV., and ending with the early part of the present reign, Quakers, Moravians, Separatists, and persons who had seceded from

any of these bodies, but retained a conscientious objection to taking oaths, were permitted to make an affirmation upon every occasion on which they would otherwise have had to take an oath. By the Common Law Procedure Act 1854, § 20, every person called as a witness in a civil action who might refuse, on conscientious grounds, to take an oath, was enabled to make an affirmation instead. By an Act of 1861 persons called as witnesses in criminal trials were permitted, on declaring that the taking of an oath was according to their religious belief unlawful, to make an affirmation instead. By the Evidence Further Amendment Act 1869, explained by an amending Act of 1870, a person called as a witness in any proceeding, civil or criminal, might, if he objected to take an oath, and if the court were satisfied that it would have no binding effect upon his conscience, give his evidence upon affirmation simply. By the **Parliamentary Oaths Act 1876** it was enacted that every person for the time being by law permitted to make an affirmation instead of taking an oath, should be allowed, on making an affirmation in the form therein prescribed, to take his seat in either house. In the case of *Clarke v. Bradlaugh* (vol. 7, Law Reports, Queen's Bench Division), it was held by Mr. Justice Mathew, and confirmed by the Court of Appeal, that this Act did not apply to any person enabled by the Acts of 1854, 1861, or 1869, to give his evidence on affirmation in a court of justice, but only to persons entitled upon every occasion on which an oath may lawfully be required to make an affirmation instead. Thus an atheist may give evidence upon affirmation in a court of justice; but he cannot by taking an affirmation qualify himself to take his seat in either house.

Affirmation, M.P.'s in favour of Permitting. See APPENDIX.

Afghanistan. A country (about 300,000 sq. m.) separating the Russian empire from India. It is not a state, in the European sense of the term, and although the Afghan race exercises more or less control over it, there is, strictly speaking, no such thing as an Afghan nation. Formerly, most of the country was under Persia. Early last century the Afghan tribesmen began to emerge from the chaos then prevailing, and in a few years achieved such successes over the degenerate Persians, that their leader, Mahmoud of Candahar, became Shah of Persia. After a short while, however, the Afghans were expelled from Persia proper by the Turcoman Nadir Shah, and their operations were subsequently chiefly directed against India. The growth of the British rule greatly curtailed their movements in this direction. The English entered the country in 1839, and a series of political and military errors on our part resulted in disaster to our army. After the war of revenge and the retirement of the British army, the agitation of the country continued up to the time of Shere Ali. This Ameer crushed one hostile element after another, and gave Afghanistan its present proportions. So unstable was his rule that his first defeat dissolved its cohesion, and the present Ameer would never have re-established the authority of Cabul over the other parts of the country, but for England. He only consolidated his power by an appalling number of murders—all the chiefs and notables hostile to him being despatched one by one. As regards Cabul, there the power of the Ameer is tolerably safe,

because the lofty Hindoo Koosh shields his capital from the Russians, and his presence checks the internal elements of disorder; but north of the Hindoo Koosh, in Afghan Turkestan, only conquered and annexed by Shere Ali twenty years ago, his rule is very precarious. At Herat, too, the non-Afghan elements and the antagonism to the Ameer on the part of discontented chiefs would render its seizure and incorporation with either Russia or India a relatively easy matter, and to a less extent with Candahar also. The Afghans are not the founders of the cities they occupy, but foreigners who have seized them, and by their excesses and strife reduced them to a condition of wretchedness and poverty compared with that prevailing before they passed into their hands. Relieved of the incubus of the Cabuli Afghans Candahar and Herat would rapidly revive as emporia of trade, and their prosperity is assured by the future Indo-European railway, when the Russian and Indian railways will touch. It is asserted that the Afghans present a national front to Russia, because, although their chaotic tribes are always intriguing and squabbling, they are ever ready to unite against a foreign foe; but the same was said of the Turcomans, whom Russia found no difficulty by a slow sapping process of disintegration to gradually annex. The misconception as to the strength of Afghanistan rises from this—that while our troops have fought the Afghans, they were compelled to attack them where they were densest and best protected by mountain ranges and narrow passes; hence politicians imagine the same conditions would have to be faced by the Russians, whereas the Russians are posted close to where the Afghans are few and weak, and have no natural barriers to support them until our own frontier near Quetta is reached. Practically there is no material Afghan barrier between Penjdeh and Pishin, and of the 6,000,000 subjects of the Ameer, only half are Afghans, and those 3,000,000 discordant tribesmen have to provide for the defence of a country more than twice the size of Great Britain and Ireland. Afghanistan, therefore, really possesses no inherent strength to resist absorption by Russia. The death of the Ameer would probably be followed by a fresh period of anarchy, of which Russia would take advantage. Our best policy would, therefore, be to accept the inevitable, and endeavour to make sure of such portions of the country as are absolutely essential for the protection of India. The Afghans (Pathans) whom we have already annexed have proved faithful servants as soldiers and officials, and under settled rule they lose that ferocity and hatred of the European which some writers have exaggerated as permanent traits of their character. Intelligence from the Afghan Boundary Commission, dated Meruchak, 24th March, reports that the erection of boundary posts has been completed from Gouz-i-Khan to the Murghab river.

Africa, Central. Applied in its widest sense to indicate all of the continent lying between the parallels of 15° N. and 20° S. lat., comprising an area of possibly 8,000,000 sq. miles, with a population roughly guessed as 100,000,000. The term is more closely connected with the regions lying between the Suaheli coast and Lower Guinea, comprising the Congo valley, the Great Lakes, Equatorial Africa proper, and the native states north of the Zambesi. (See CONGO FREE STATE, WEST AFRICAN COAST, ZANZIBAR, SOUDAN, ABYSSINIA, SOMALI,

MOZAMBIQUE, ZAMBESI, NYASSA, BLANTYRE, KILIMA-NJARO, etc.)

African Exploration. In 1870 African exploration had only commenced, the journeys of Burton, Baker, Speke, and Grant, and the ever memorable labours of Dr. Livingstone, being all that were known to the British public; and, except the portions traversed by them and Dr. Lacerda and Ladislaus Magyar, most of central tropical Africa was a *terra incognita*. Since that time exploration has progressed very rapidly in that region, and Africa has been traversed from side to side by numerous bands of explorers of various nationalities, who have been steadily, year by year, unfolding the mysteries of the "Dark Continent," so that countries formerly unknown are now more accurately mapped than a large portion of North America was at the accession of Queen Victoria. Owing to the labours of English explorers, the problem of all time—the sources of the Nile—has been solved. The courses of the other great rivers of Africa (the Niger, the Congo, and the Zambesi) have been laid down; and in this the lion's portion of the work has been accomplished by British energy. For the journeys and labours of Livingstone, Stanley, Cameron, Baker, Burton, Speke, and Grant, we must refer the readers to their names; but, besides these, in these later years we have to record many others: Schweinfurth, for his great journey amongst the Niam Niams, and discovery of the Uelle; Nachtigal, for his work in the Tchad basin; Rohlf's, for his travels in Morocco and north-west tropical Africa; Serpa Pinto, for his journey from Benguela to Pretoria, which he is following up by an attempt to cross the continent from the Mozambique coast; Wissman, who from Loanda has reached the Zanzibar coast; Massari and Matteucci, who from Darfur and Kordofan traversed the central Soudan to the upper Niger; Brito Capello and Ivens, who have also crossed the Dark Continent from east to west; Keith Johnston, one of the martyrs to the cause, and his collaborator and successor Mr. Thomson, who has also on his own account performed a most successful journey through the Masai country to Lake Bahringo; Vander Decken, Mohr, Mauch, Logge, Loesche Peshel, Elliot, Carter, Debaize, Hore, Elton, New, O'Neill, Antinori, Carter, Coterill, and many others have contributed to our knowledge of Central Africa; and amongst these O'Neill and Cameron are distinguished for the extreme accuracy of their work. We must not omit, in African exploration, the name of Sir John Kirk, the fellow-traveller of Livingstone, and who, as our representative at Zanzibar, has been of great assistance to all the explorers who have made that place their starting point. On the Nile the name of General Gordon (*q.v.*) will be dear to all Englishmen, and those who worked under him—Chipendale, Watson, Long, Stone, Gessi, Piaggia—must also be allowed a place in the list of African explorers; whilst of unofficial travellers in the Nile districts Tinné and Lucas are only two among many. Compiegne, the predecessor of De Brazza, and those associated with them in their labours, have also a title to our respect; and in Southern Africa the name of Erskine will be for ever associated with the cause. The labours of all this army of explorers have quite changed the familiar map of Africa, while almost daily fresh discoveries are adding to our knowledge. The

missionaries have followed close on the footsteps of the explorers, and an English missionary bishop has justified his claim to the title of Bishop of Central Africa, by visiting the shores of the Victoria Nyanza. The King of the Belgians has been a most liberal and consistent patron of African exploration, and to his action is due the labours carried on by the International Association, and the foundation of the Congo Free State (*q.v.*). The natural wealth of these hitherto unknown countries, and their capabilities for trade, having been brought to the notice of merchants and manufacturers, many efforts have been, and are being, made to establish commerce and develop their latent resources; but though the bulk of African trade is large and valuable, most of it is drawn from the regions immediately adjoining the sea coast, and the difficulties of communication have hitherto prevented the vast extension of mercantile transactions which had been fondly hoped for. The Niger, and its affluent the Benue, have been, however, in part utilised, and English merchants are rapidly pushing on along these two great highways, and have, up to the present, distanced all competitors, notwithstanding the attempts of Herr Flegel and other Germans to dislodge them from the position which they have won by the expenditure of life, labour, time, and money. That experiment in new states—"the Congo Free State"—is avowedly founded in the interests of commerce, but hitherto it has done nothing but pioneer the way; and until the Congo, at Stanley Pool, is joined to the lower river below the falls or some point on the sea coast by a line of light railway, the produce with which the population of the banks of it and its affluents are willing to pay for the manufactures of civilised countries are for the most part too bulky to bear the cost of transport. The intentions of King Leopold in founding this country, and the money and care he has devoted to it, should by this time have shown a larger return; but though much has been heard of "pocket-handkerchief flags" and sham treaties in contrast with the agreements made by the agents of the International Association, the report of the officers sent by Germany to inquire into the matter shows that their treaties, into which many of the chiefs were reported to have entered, are now repudiated by them, declaring they never understood their terms. This is much to be deplored, if true, as any breach of faith or misunderstanding with these dusky potentates will do much to hinder the opening up of the interior of Africa. In Eastern Africa one of the outcomes of the discoveries of these later days has been the foundation of a German colony (see GERMAN COLONISATION). The great highway of the Nile, which was, under the sagacious management and policy of Ismail, the ex-Khedive, in process of being opened up in such a marvellous and unexpected manner, has, by the unhappy events of the past three or four years, been again closed to civilisation and science; but it may be hoped that at no distant date peace will be again restored to those unhappy regions, and that the explorations of Central Africa from the Upper Nile may be pushed on so as to connect with the labours of those who are now working on the Congo and Benue, and one of the remaining

spaces which are still marked on the maps as unexplored will be as well known as the country around the Nyassa lake or the course of the Zambesi. The greatest hope that exists for the future of Africa, and its thorough exploration, civilisation, and utilisation, is in the spreading northwards from the Cape of Good Hope colony of hardy pioneers, who, whether as merchants, hunters, missionaries, or travellers, are rapidly increasing our knowledge of the districts to the south of the Zambesi, and who at no distant date may be confidently expected to push their way into the rich and fertile countries lying between that river and the Congo. That this is no dream or ideal will be readily allowed by all those who have followed the proceedings of Sir Charles Warren (*q.v.*) in South Africa, and the extension of British rule, which bids fair to be of benefit to the natives. The Portuguese have begun to utilise the discoveries which have been made from their provinces of Angola and Mozambique, and the first railways in southern tropical Africa may yet be constructed in their dominions; and they, in consequence, may be the first to reap the benefit of recent discoveries. The work of African exploration is now entering on a fresh phase. The work of the solitary traveller and unaided explorer have told the world that a virgin continent lies before it, to be brought into commercial relations with the busy toilers of our industrial centres; they have pointed out the courses of the great rivers, and laid down the positions of those wonderful lakes, whose presence in these tropical regions geologists have not yet accounted for; they have in many directions ascertained the height of mountains, plateaux and hills above the sea, and, as far as lay in their power, have pointed out the various vegetable and other products of the different regions they have visited. The parts of Africa where the ground is now absolutely new to the explorer are the great district between the Victoria Nyanza and Somali Land (*q.v.*), the tract between the farthest point of Schweinfurth and Nyangive, the small piece of doubtful country between the Tanganyika and the Albert Nyanza, the country between the Kong mountains and Liberia, and the Ivory, Grain, Slave and Gold Coasts, and from Lake Tchad to the Congo basin. Here is still ample ground on which the ardent explorer may win his spurs; but scarcely any great geographical prize remains for competition, such as the sources of the Nile, the fixing the course of the Congo, or the discovery of the great lakes. Even in scientific exploration, so much has been accomplished—much more than could have been expected when the difficulties under which they laboured are considered—by the early explorers, who, taking their lives in their hands, went forth to open up the way for perfect and detailed examination of the countries they discovered, that the chief, and, indeed, the only problem of extent at all equal to those which have been lately solved is the question as to whether the volcanic chain of Annabou, Principe San Thomé, Fernando Po, and Mount Camerões is not connected by a line of volcanic mountains, active or extinct, with the chain on the east of Africa, which commences in the Comoro Islands and stretches northward to the lake regions by Kilima Njaro, Mt. Kenia, and the volcanic hills visited by Mr. Joseph Thomson. The mysterious mountain

of Gaborague, of which Mr. Stanley gives such extraordinary accounts, favours the belief that such a chain does exist; and there is a hope that a chain of mountains, extending eastwards from the Camerões between the systems of the Congo and Niger, may afford healthy positions for the habitations of traders and missionaries, and enable the exploration of this portion of the continent to be carried out without that danger to life and health which has unfortunately attended so much of the work which has hitherto been carried on in Africa. As a result of what has already been done, there are now steamers on Lakes Tanganyika and Nyassa, and on the Congo and Zambesi; and permanent stations have been founded, where travellers of the future may be able to break their journeys and find means of refreshment and aid in prosecuting their researches. But still, while in the greater portion of tropical Africa the only means of transport are human beings, the task of exploration will be difficult and the proper development of commerce an impossibility. Men who should be employed as hunters, agriculturists, and herdsmen, and in adding materially to the wealth of the continent, are now used in the unprofitable task of carrying the scanty exports to a distant market, whilst all the more bulky products are wasted. One great point that has been brought to light by the recent travels of European explorers is that Africa is a very poorly populated continent, and instead of being a field for the supply of labour she is greatly in need of a larger population. At present not only is Africa under-populated, but the scanty number of her inhabitants, owing to the dreadful drain caused by the internal slave trade, is rapidly diminishing, and unless immigration on a large scale takes place Africa will not become the profitable market for our goods which so many have hoped she would prove. Fortunately for the world, China is waking up, and the surplus labour of her densely populated provinces, which has hitherto been directed to California and Australia, where the Chinese, in consequence of underselling the labour of their Anglo-Saxon competitors, have been the reverse of welcome, may yet be turned to Africa, and Chinese industry and perseverance may find a profitable field for their exercise in the fertile plains and valleys of Africa, where the Anglo-Saxon, owing to climatic reasons, being unable to labour in the fields, would not come into adverse contact with them. It is hoped that the explorations of Africa in the Victorian era may not only prove of lasting benefit and advantage to the manufacturing nations of Europe, but also materially assist in raising the negro races from the depths of degradation in which they now exist, materially alleviating the ills they suffer from, and likewise prove effectual in totally abolishing the traffic in human beings which has proved so great a curse to Africa, and such a bar to the cause of African exploration and progress.

African Lakes. The great equatorial chain consists of the following, as well as sundry lesser ones:—**Albert Nyanza**, or **Luta Ndrige**, lying under equator, 2,500 feet above sea-level, 150 by 40 miles, discovered by Baker, 1864; to east of it, **Victoria Nyanza**, 3,800 feet above sea-level, 300 by 200 miles, discovered by Speke, 1858, explored by Stanley; southward, **Tanganyika**, 2,700 feet above sea-level, 400 by 50

miles, discovered by **Burton**, 1858, explored by **Livingstone**, **Stanley**, and **Cameron**; south-east, **Nyassa**, 1,500 feet above sea-level, 358 by 38 miles, discovered by **Livingstone**, 1859; south-east, the small **Shirwa**; far to west, **Moorkata**, 65 by 60 miles, discovered by **Livingstone**, 1867; and south of it, **Bangweolo**, or **Bemba**, 3,600 feet above sea-level, 150 by 75 miles, discovered by **Livingstone**, 1868. North and west of **Moero** are other lakes, **Lanji**, **Kassali**, **Lohemba**, etc., not yet fully explored. (See CONGO FREE STATE, NYASSA, AFRICAN EXPLORATION, etc.)

Agencies, News. See NEWS AGENCIES.

Agg-Gardner, Mr. James Tynte, M.P., of Hadle House, Cheltenham. Educated at Harrow and Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1873). Lord of the manor of Cheltenham. Returned in the Conservative interest as member for Cheltenham (1885).

Agnew, Mr. William, M.P., Summer Hill, Pendleton, near Manchester, b. 1825. Head of the firm of Thomas Agnew and Sons, of Liverpool and Manchester, and J.P. for Lancashire, Manchester, and borough of Salford. Returned in the Liberal interest as member for Stretford Div., South-East Lancashire (1885).

Agnosticism. A term generally adopted to express the doctrines of a certain school of English thinkers of whom Professor Huxley and Mr. Herbert Spencer are the chief exponents. The term in this connection was first used, some twenty years ago, by Professor Huxley, to "denote," he says, "people who, like myself, confess themselves to be hopelessly ignorant concerning a variety of matters about which metaphysicians and theologians, both orthodox and heterodox, dogmatise with the utmost confidence." The term thus "invented" by Professor Huxley was first used and popularised by the *Spectator*, and now the Agnostics are "assuming the position of a recognised sect." According to Professor Huxley, Agnosticism "simply means that a man shall not say he knows or believes that which he has no scientific ground for professing to know or believe . . . Agnosticism simply says that we know nothing of what may be beyond phenomena." A small monthly, *The Agnostic*, is published at 17, Johnson's Court, Fleet Street, E.C.

Agricultural Colleges. The only two purely agricultural colleges in England are those of **Cirencester** and **Downton**. Scotland has one, in **Glasgow**. The **Albert Memorial College**, Framlingham (founded 1864), devotes a portion of its curriculum to agriculture.—1. The Royal Agricultural College, Cirencester, incorporated by royal charter in 1845, has six residential professorial chairs, and grants certificates of proficiency and a diploma of membership and associateship. In 1870 a supplemental charter, with new powers, was obtained, and in March 1880 the College, by command of the Queen, was styled the "Royal Agricultural College." It is a handsome institution, admirably equipped, and offers valuable and practical advantages to students at a moderate cost: in-students pay £135, and out-students £75 per annum (with a few extras). The college course embraces a sound practical education for home or colonial estate management. Attached to it is a large farm for practical instruction; and it has also a chapel, library, museum, botanic garden, lecture theatre, laboratories, veterinary hospital, meteorological station, and workshops. The farm, which is of a mixed

character, consists of about 500 acres, of which 450 are arable, so variable as to admit of experimental treatment. There are several scholarships and prizes open to the students.—2. The Downton College of Agriculture, near Salisbury, was established in 1880, with the object of supplying sound and practical instruction in agricultural subjects, to qualify students to be land agents, farmers, or surveyors. The method of instruction consists of field classes, practical work, and catechetical lectures. Weekly examinations are conducted on the farm, in the laboratories, and by printed papers. Each student keeps a farm journal, which is inspected and reported upon at regular intervals. A complete two years' course prepares for examinations of the Royal Agricultural Society and of the Institution of Surveyors. There is a farm of 535 acres, and students are expected to take part in field operations and to assist with live stock when required. Young men over twenty-one years of age are received as out-students. The fee for in-students (including board, lodging, tuition, and laundry) is £120; for out-students, £60 per annum (with extras for private rooms, etc.). A scholarship of £10 is offered for competition among the students who have completed their first year, and prizes are awarded for proficiency.

Agricultural Holdings. This term is applied to farms occupied by tenant farmers, who pay rent to the owner for the privilege of cultivating the land, and reaping the produce, under certain conditions. These are prescribed by lease, or recognised by custom; and their object is to insure the management of the holding according to the "rules of good husbandry." Over the greater part of England, tenant farmers occupy their holdings as **tenants at will**, under yearly leases with six months to quit on either side; but in Scotland leases of nineteen or twenty-one years are the general rule. Up to the year 1881 the penalty of a breach of the conditions of the lease, whether by growing several corn or other exhaustive crops in succession in violation of a particular rotation, or by the sale of straw, was absolute forfeiture of the lease. But in that year the late Lord Cairns (*q.v.*) secured the passing of an Act which provided that no forfeiture should take place in such circumstances if the tenant paid money damages. On the other hand, the **Agricultural Holdings Act, 1883**, which rendered the permissive Act of 1875 compulsory, so that neither landlord nor tenant can contract themselves out of it, entitles a tenant to claim, on quitting his holding, **compensation for improvements** which he has made during his occupation, and of which he has not reaped the full fruits. The measure of the compensation is "the value of the improvement to an incoming tenant," but in estimating such value "what is justly due to the inherent capabilities of the soil" is not to be taken into account as part of the improvement. Previously to the passing of this Act the basis of compensation for any improvement allowed under a private agreement was the original outlay on the improvement. Under the present Act the actual outlay need not be an element in the calculations of the referees or umpire. Various Acts have been passed in recent years with reference to Ireland, which have materially changed the position of the **Irish tenant** in his holding. In addition to the right of compensation for disturbance or unexhausted improvements, he

can claim a judicial revision of his rent, and to sell his interest in his farm. The *Land Purchase (Ireland) Act* affords him facilities for becoming the owner of the soil he cultivates; the state advancing a certain portion of the purchase money, with the payment of instalments and interest extended over a number of years. The *Arrears Bill* was passed with the view of helping impoverished tenants in the payment of their rents. Holdings vary in size according to their proximity to centres of population, or the system of agriculture pursued. Generally speaking, farms near towns and cities, where straw is sold, and a comparatively small quantity of stock is kept, and quantities of general manure bought, the usual size of arable farms is from 200 to 300 acres; in rural districts, where the whole of the straw is used in litter for the stock, they vary from 300 to 600 acres; then come the sheep farms of the uplands, ranging from 600 to 1000 acres each; while the mountain grazings are only limited in area by the capital of the occupier. In Ireland the holdings are generally smaller; as they are in France and some other Continental countries, where what is known as *La Petite Culture* is extensively carried on. The question as to the comparative advantages of large as against small farms is a common subject of controversy among agriculturists; and each system has its advocates. It is argued in favour of large farms that they are necessarily occupied by men of capital, who are more able to carry out improving works of drainage and irrigation (*q.v.*), and to utilise more extensively improved labour-saving appliances and machinery than the occupier of the small holding; therefore a larger amount of produce per acre with fewer hands employed is obtained in the former than in the latter case. There is not only the saving in the labour, but in the circumstance that one set of buildings suffices where several sets would be required in the cases of several small farms. It is also contended that although there are fewer people occupied and maintained directly on the land in the case of a large farm, yet those persons not free to engage in other pursuits benefit along with the whole population by the increased production of the large farm. The question as to the advisability of diminishing the number of independent tenant cultivators, and proportionately increasing the number of the dependent labourers on the soil, is a question that must doubtless be left to the social economist and statesman. Those who advocate the system of small farms, while admitting that probably in districts or countries where the land is being brought under the plough for the first time, or where agriculture is in the first steps towards development, it may be advisable to have the capitalist to carry out works of drainage and irrigation, etc., which can be most cheaply and efficiently done on a large scale, assert that for an advanced or settled state of agriculture small farms are more suitable, as promoting industry, thrift, individual wealth, and a spirit of independence among a large number of people, than in the case of large holdings. It seems to be held, moreover, that most of the advantages of the large farm system may be attained by combination for the purpose of securing the joint use of costly appliances and machinery, and for the carrying out of improving works applicable to a wide district. Small farms, too, it is

contended come nearest the fulfilment of that condition of things which leads "to the greatest good of the greatest number." A system, however, which encourages a mixture of large and small farms finds favour with many leading agriculturists, as being most suited to the different degrees of skill, capacity, and means which characterise the members of the agricultural as well as every other community.

Agricultural Holdings Act, 1883. See AGRICULTURAL HOLDINGS.

Agricultural Labourer and the Land. See LAND QUESTION, THE.

Agricultural Returns, 1879-85. See APPENDIX.

Agriculture is the art of tilling the ground, cultivating crops, breeding and rearing livestock, manufacturing butter and cheese. In the United Kingdom, as in most countries well advanced in settlement and civilisation, crops are grown in a certain order of succession, termed rotation—that is, a grain crop alternating with a root, a fodder or a grass crop—along with a liberal application not only of farmyard manures, but artificial or concentrated manures. The Royal Agricultural Society of England, the Highland and Agricultural Society of Scotland, the Royal Agricultural Society of Ireland, have done much by exhibitions and awards for inventions or efforts in agricultural mechanics or practice to promote the science and art of agriculture; while the Central and Provincial Farmers' Clubs, the Farmers' Alliance, and the various chambers of agriculture have, by discussions and the diffusing of information in reference to the condition and prospects of agriculture, promoted from time to time useful legislation on the subject. The United Kingdom must be regarded as a great agricultural, as well as trading country. The intelligence and skill of its farmers, the average yield of its productions per acre, as compared with other countries, the early maturing, prime-beef producing qualities of its live-stock, are universally admitted to be the distinguishing features of British agriculture. This country has only 22,250,000 acres of arable land, and 25,000,000 acres of permanent pasture; but it possesses a population of 36,000,000, and practises a system of free trade which invites the whole world to compete in its markets on the same terms as the home-producer. British agriculture, therefore, only constitutes a portion of the vegetable and animal food consumed by the people of the kingdom. Portugal, Holland, France, and Egypt contribute largely to the export supply of onions, worth in all £532,007; and nearly the whole of the vegetables and raw fruits imported (excluding apples), valued at £1,772,507, come from France and Spain. The vast pastoral territories and fine climate of Australia enable that island-continent to send nearly three-fourths of the foreign supply of wool to the British market, the aggregate value of which, in 1884, was £26,042,283. Cattle and sheep, too, are so cheaply fed in Australia and the United States, that thousands of carcasses are boiled down for the sake of the tallow and stearine, which is imported to this country; of the total value of these two articles imported, £2,106,020, in 1884, three-fourths came from the two countries just mentioned. The proportional value per head of the population of the agricultural food products imported from abroad was, in 1884, £312'3. From the beginning of this century up to the repeal of the corn laws,

there had been several periods of depression in agriculture, which were supposed to be caused by over-production, high rents, low prices, and excessive local burdens. Parliamentary inquiries on the subject were held in 1804, 1815, 1822, 1833 and 1836, which resulted in the imposition of duty on foreign wheat when the price at home fell below a certain figure. For instance, in 1822 an Act was passed fixing the limit of price at which importation should be permitted at 70s. for wheat, 35s. for barley, 25s. for oats, per quarter; and also imposing a new sliding scale of duties on foreign wheat when prices were from 70s. to 85s. per quarter. But farmers and the public generally began to recognise that protective duties on grain did not remove depression, and that agitation commenced which led to the repeal of the corn laws. A long spell of prosperity for the British farmer ensued, due not so much to the repeal of the corn laws as to the outbreak and continuance of Continental wars, which threw out of cultivation large areas of wheat lands, and turned countries for the time being from being exporters to importers of grain. This condition of things led to increased demand and unusually high prices for grain in Britain; but the causes having passed away, the reaction came. Its effects, now felt for several years, have been aggravated by, among other causes, increasing rates, the low prices obtained for agricultural produce, in consequence of the increasing competition, arising from importations from abroad, and by a succession of unfavourable seasons. A Royal Commission sat last year to inquire into the causes, and suggest, if possible, remedies for the removal of the depression in agriculture, and various recommendations were made which met with the general approval of the agricultural community. But only one or two of these have had imparted to them the vitality or force of legislation. The Agricultural Holdings Act was, in 1883, however, made compulsory; and now the landlord, or tenant, is prevented from contracting himself out of the Act which entitles the tenant, on quitting his farm, to compensation for unexhausted improvements. Apart from the numerous proposals made for the reform of the land laws, such as the abolition of the law of primogeniture, the curtailment of the system of entail and settlements, the adoption of a better system of land transfer, the more immediate remedies suggested for the removal of agricultural depression are "a general revision of existing rents, complete security for the tenant's capital, by granting him continuity of tenure, with free sale of his interest in his holding, the landlord having a right to pre-emption," together with freedom of cropping, reduction of local taxation, relief from excessive railway charges, the extension of fruit and vegetable, dairy and poultry farming. In many cases a generous effort has been made on the part of landlords to assist the tenant by a reduction of rent from 10 to 20 per cent.; but an unusually large number of farms in the kingdom are, and have been for the past two or three years, empty, or are being cultivated by the landlords. The varied character of the climate in the kingdom has much to do with the particular system of agriculture pursued in any district. In the eastern counties, which comprise the comparatively dry and sunny districts of the country, the cultivation of wheat and barley largely pre-

vails; while in the humid climate of the western counties, and in colonies where the area under cultivation is vast compared with the population, and where, too, the land is cheap, the payment of rent the exception, not the rule, and almost every owner the cultivator of his own land, one of their most important industries consists in the sending of their agricultural products to the British market. The general consumer is thus benefited, though the home farmer has to be satisfied with a smaller price than that obtained before for his produce. The United States, Russia, British India, and Australia, and other countries send to Britain annually over £70,000,000 sterling worth of wheat and wheaten flour, other grains and meals. £10,504,877 worth of live cattle, sheep and pigs, were imported in 1884, the larger number of which came from the United States, Canada, Denmark, Holland and Germany; £15,025,966 worth of fresh-preserved and salted meat of all kinds were imported from Australia, Canada, and the United States; £2,910,493 worth of eggs came principally from France, Belgium and Germany; while nearly two-thirds of the foreign supply of butter, including butterine, amounting in value to £12,543,455, was sent from Holland, Denmark, and France; four-fifths of the cheese imports, with a total value of £5,001,635, came from the United States, Canada, and Holland; and Belgium and France exported to this country nearly the whole of the foreign supply of poultry and game, including rabbits, the value of which was £670,609; and a considerable portion of the shipment of potatoes, valued at £824,205, came from the Channel Islands and France; while dairy farming, stock breeding and rearing, and root-growing, are the dominant features of agriculture pursued. The humid climate of Ireland lends itself very suitably to the rearing of cattle and to dairy-farming. In the uplands and hilly districts sheep-farming with a little corn-growing is generally carried on; the extended use of machinery in the operations of agriculture is borne out by the fact that, according to the census of 1881, though the number of persons engaged in the cultivation of farm lands has since 1871 decreased 9·3 per cent., the number of attendants on agricultural machines has considerably increased.

Allesbury, Ernest Augustus Chas. Brudenell-Bruce, P.C., 3rd Marq. of (creat. 1821), was b. 1811, and succeeded his bro. 1878. Was Lord of the Bedchamber to William IV.; Vice-Chamberlain of the Queen's Household (1841-46), and sat as M.P. for Marlborough from 1832 till his succession to the title.

Alisa, Archibald Kennedy, 3rd Marq. of (creat. 1831), was b. 1847, and succeeded his father 1870. The 1st Lord Kennedy was one of the six Regents of Scotland during the minority of James III.

Ainslie, Mr. W. G., M.P., was b. in India 1832. Is J.P. for Lancashire. Head of Harrison, Ainslie & Co., of Ulverston. Returned in the Conservative interest as member for North Lonsdale Division, N. Lancashire (1885).

Air Gas. See ILLUMINANTS.

Airlie, David Stanley Wm. Ogilvy, 8th Earl of (creat. 1639), was b. 1856, and succeeded his father 1881. He served in Nile expedition (1884-5), and was wounded at Abu Klea. Several heirs to the Airlie estates were attainted for their share in the tause of Prince Charles Edward. The 6th Earl received a confirmation of his hereditary dignities (1826).

Akers-Douglas, Mr. Aretas, M.P., of Chilton Park, near Maidstone, was b. 1851. Educated at Eton and at Univ. Coll., Oxford. Called to the bar at the Inner Temple (1874). Is J.P. for Kent and Dumfries, lieutenant in the East Kent Yeomanry, and was Parliamentary Secretary to the Treasury (1885). Returned in the Conservative interest as member for East Kent (1880-85); re-elected 1885.

Aksakof, M. Ivan, a distinguished Russian publicist, journalist, and author, son of Sergius Aksakof, and brother of Constantine Aksakof, was b. 1823, in the Orenburg government. Educated at St. Petersburg. Held an appointment for a time as a civil servant under the Minister of Justice. Visited South Russia (1857) under the auspices of the Imperial Geographical Society. M. Aksakof, besides being an author, was engaged in the editing of the *Molva, Den, Russkaya Besyeda, the Parus* and the *Rus*. He died February 8th, 1886.

Alabama Claims. See INTERNATIONAL ARBITRATION.

Alarm Post. See FIRE EXTINCTION.

Albania. A wild and mountainous province of Turkey, renowned for the warlike qualities of its inhabitants. It is in a semi-independent state. After the treaty of Berlin an Albanian League was formed, with the connivance of the Porte, to resist the cession of any part of the country, either to Austria or Montenegro, in 1878. In April 1880 the League revolted against Turkey, but was defeated, and reduced to nominal submission, in May 1881. Renewed revolts took place about June 1883, and in November an application was made to the Powers for annexation to Greece, which, however, came to nothing.

Albany, Duchess of. Daughter of the Prince and Princess of Waldeck-Pyrmont; b. Feb. 17th, 1861. She married H.R.H. Prince Leopold of England, April 27th, 1882.

Albany, Duke of. Fourth son of the Queen, b. April 7th, 1853, mar. April 27th, 1882, to Princess Helena of Waldeck. The title Duke of Albany was conferred on Prince Leopold in 1881. Educated at Oxford University. He died very suddenly at Cannes, March 28th, 1884.

"Albatross" (German Man-of-War). See SAMOA ISLANDS.

Albemarle, George Thomas Keppel, 6th Earl of (creat. 1696), was b. 1799; succeeded his brother 1851. He entered the army in April 1815, and served at Waterloo; was a Groom-in-waiting to the Queen, and one of Lord John Russell's private secretaries. Sat as Liberal M.P. for East Norfolk (1832-35), and for Lymington (1847-50).

Albert and European. See FIRE AND LIFE INSURANCE.

Albert Memorial College. See AGRICULTURAL COLLEGES.

Albo-Carbon Light. See ILLUMINANTS.

Alcester, Frederick Beauchamp Paget Seymour, 1st Baron (creat. 1882), son of the late Sir Horace Beauchamp Seymour, M.P., was b. 1821. He entered the royal navy (1834), promoted to Vice-Adm. (1876), and Adm. (1882); was private secretary to First Lord of the Admiralty (1868-70), and a Lord of the Admiralty (1872-4, and 1883-5); served in Burmese war (1852-3); commanded the *Meteor* floating battery in the Black Sea (1855-6); and the naval brigade landed for service in New Zealand (1860-61), where he

was severely wounded; was Commander-in-chief in the Mediterranean (1880-83), and commanded the naval forces in Egyptian campaign (1882), and was raised to the peerage for his services in the same year.

"Alert" and "Discovery," The. See ARCTIC EXPLORATION.

Alexander, General Sir James Edward, C.B., F.R.S., d. April 2nd, 1885, aged 81 years. He acted as private secretary and aide-de-camp to Sir Benjamin D'Urban when Governor of Cape Colony, and also while Commander of the Forces in British North America, and was present in the field in the Burman, Persian, Turkish, Portuguese and Kaffir wars. He was likewise employed on a Government expedition of discovery in the interior of Africa, and on an exploring expedition in the forests of New Brunswick, for which services he received the honour of knighthood in 1838.

Alexander I., Prince of Battenberg, who was elected Prince of Bulgaria by the Constituent Assembly on April 29th, 1879, is the son of Prince Alexander of Hesse and Princess Julia of Battenberg, and was b. 1857. Being closely related to the Russian Imperial family through his aunt, the late Empress Marie, wife of the late Czar Alexander II., the young Prince of Battenberg entered the Russian army and served with it in the Russo-Turkish war (1877-78). After the war he joined the German army as an officer of the Prussian regiment of the Garde du Corps. The fact that he had fought for the liberation of Bulgaria from the Turkish yoke, coupled with his high connections as nephew of the Czar "Liberator," marked out the Prince of Battenberg as the most eligible candidate for the throne of the new Principality and the vote of the National Sobranýe in his favour was unanimous. Entering upon his new duties (July 1879), and being virtually an independent sovereign, the young Prince of Bulgaria at first chose his ministers from among native Bulgarians of the Liberal party. By the help of numerous Russian officers he founded a native army, which in the desperate crisis of 1885 astonished Europe by its soldierly qualities. Russia's influence was naturally very strong in the young State; and the native ministers making many mistakes through their inexperience, Prince Alexander, two years after his arrival in Sophia, summoned a new assembly, from which he obtained almost dictatorial powers. The old cabinet was dissolved, and for the next few years the Prince's chief advisers were Russians. The Bulgarians of Eastern Roumelia had never been satisfied with the arrangements of the Berlin Treaty, which separated them from their brethren of the Principality. The agitation for the union of the two States had been going on in secret for years; when in the autumn of 1885, shortly after Prince Alexander had returned from a visit to England, whither he had gone to attend the marriage of his brother to Princess Beatrice, a revolution took place in Philippopolis, the Eastern Roumelian capital, and the union of the two Bulgarias was proclaimed under the sovereignty of Prince Alexander. The latter did not hesitate to accede to the popular wishes, and proceeding to Philippopolis was received there with immense enthusiasm. The Powers of Europe who were parties to the Berlin Treaty could not look with indifference on these events, which constituted an undoubted breach of that

instrument. Servia and Greece, too, demanded corresponding enlargements of their territory, if Bulgaria were to be permitted thus to aggrandise herself. The jealousy of Servia was such that King Milan suddenly declared war against Bulgaria, and invading the principality with a large force drove back the weak and unprepared Bulgarian garrisons to within a day's march of Sophia. At the moment when the world was expecting to hear of the triumphant entry of the Servians into the Bulgarian capital, Prince Alexander collected his scattered forces, and, after a week's desperate fighting, routed the Servians and drove them, disordered and demoralised, back across the frontier. So complete was his victory that he was able to occupy part of King Milan's territory, of which he remained in possession, when, through the action of the Powers, an armistice was arranged. Thus ended a war all the honours of which were with Prince Alexander, who, with his victorious troops, made a triumphant entry into Sophia in the last week of December, receiving a most enthusiastic ovation. The energy and ability shown by the Prince, and the bravery, discipline and resolution of the Bulgarian troops, produced such an effect that the union of the two Bulgarias under Prince Alexander has since been confirmed by the Powers.

Alexander III., Emperor and Autocrat of all the Russias, b. March 10th, 1845. On the death of his brother the Grand-Duke Nicholas, who died at Nice (1865), he became heir-presumptive, and ascended the throne after the death of his father the Emperor Nicholas. He married (1866) Maria Dagmar, daughter of the King of Denmark, sister to the Princess of Wales and the King of Greece. Under his reign the extension of the Russian empire has been steadily increasing in Central Asia. (For the principal events of his reign see RUSSIA.)

Afonso XII. (Francesco de Assisi Ferdinando Pio Juan Mario de la Concepcion Gregorio), **King of Spain**, b. November 28th, 1857. He followed his mother Queen Isabella to Paris in 1868, when the Spanish revolutionary party drove her from the throne. Four years after he left Paris and went to Vienna, where he studied in the Theresianum. A republic was tried in Spain, after which Prince Amadeus, second son of Victor Emmanuel, was called to the throne, which he resigned after a short reign of three years, when, in 1874, General Martinez Campos, who was then dictator, proclaimed the Prince of the Asturias, as Afonso was then called, as king, who at that time was a student at the Military College, Sandhurst. He made his entry in Madrid on January 14th, 1875, and was enthusiastically received. In 1876 he took the command of the army, operating against Don Carlos, who, at the head of a large army of adherents, had been for a long time fighting for the throne of Spain. In a very short time the young king returned to Madrid in triumph, having put Don Carlos and his army to flight. In 1878 he married the Princess Maria de las Mercedes, daughter of the Duc de Montpensier, but she died five months afterwards. King Afonso married on November 29th, 1879, Maria Christina, daughter of the late Archduke Charles Ferdinand of Austria. King Afonso was a Knight of the Order of the Garter (1881). In 1883 he was made a colonel of Uhlands by the Emperor of Germany, an appointment which led to an unpopular demonstration

on the part of the Parisians, when on his way home he stopped at Paris to pay a visit to the President of the French Republic. The colonial policy carried on by Germany for a time caused a *refroidissement* between the two governments, Germany having hoisted her flag on the Caroline Islands (*q.v.*) to which Spain laid claim. The King acted with great prudence during the excitement which prevailed at Madrid. He died Nov. 25th, 1885.

Algæ, Edible and Inedible. These products are found here and there all over the shores of the United Kingdom, but on the coast-line of Ireland they are in great profusion. The commercial name of one of the most valuable edible sea-plants is carrageen moss. Its properties are known as a soothing remedy for irritation in the throat, and it has also been tested and approved as a valuable addition to materials for supplying "second course," equal if not superior, to corn-flour in all its varieties. Nevertheless, although it has been gathered so abundantly as to be used for litter in pigsties by the peasantry, and notwithstanding several wise and benevolent economists (especially of the Society of Friends) have tried, at no small cost, to bring it into use, it is still amongst the many valuable "industrial resources of Ireland still neglected." Inedible algæ, are, however, from a commercial and industrial standpoint, more important. These consist of *Laminaria digitata* (or sea girdle) and *Laminaria saccharina* (or sweet tangle). Both are rich in iodine, bromine, chloride of potassium, sulphate of potash, sulphate of soda, chloride of sodium, ammonia, etc. There are also the *Laminaria potalorum*, *Fucus vesiculosus* and *Fucus nodosus*. Some of these "seaweeds" are used for manure, some have been converted into kelp, and even more scientific processes of extracting their valuable salts have been applied. Still, "seaweeds," the quantity of which to be gathered in Ireland between drift weed and cut weed may be reckoned by the millions of tons annually, have been, and still are, neglected; but by the employment of proper capital might be made a source of very great profit and an important industry.

Algeria. One of the Barbary States of North Africa, lying between Morocco and Tunis, comprehending 122,876 square miles; pop. 3,310,000. Till 1830 was a nest of slave-trading corsairs, ruled by deys, when their power was broken and French military occupation began. The French became actual masters of the whole country in 1847, after the defeat and surrender of the famous Arab chief, Abd-el-Kader, who died recently. In 1871 French military rule gave place to civil government. Since then Algeria has been the most important of the French dependencies. It is divided into the three civil divisions of Oran, Constantine, and Algiers—capital cities of same names—and subdivided into twelve arrondissements, sending deputies to the National Assembly. This applies to the coastal region, the Saharan borders remaining divided into three military territories. Like Morocco (*q.v.*), the country possesses three natural divisions—the coastal region, the steppes, and the Saharan tracts. Inhabitants are French and European settlers, about 250,000; a few Turks, Jews, Moors, Berbers, Arabs, and Kabyles. Five-sixths of the whole population are nomades. The coast is rockbound, with coral and sponge fisheries. The only considerable river is the

Shellif, 370 miles : it runs parallel to coast, and flows into the sea at **Mostaganem**. Climate agreeable and very salubrious. There is a gigantic and verdant vegetation in parts, forests, lofty mountains, broad plateaux, smiling valleys, sandy desert with fertile oases. Some years a plague of locusts. Brackish lakes and marshes abound. Some have been drained, and Australian blue-gums planted, thus rendering unhealthy tracts habitable. A project has been mooted to introduce the waters of the Mediterranean through a series of salt marshes called **Shotts**, from the Gulf of Cades to a great desert depression behind the Atlas. There are about 1,000 miles of railway. Imports about £10,000,000; exports £7,000,000, consisting of esparto and alfa grass, barley, wine, oil, tobacco, wool, iron and zinc ores, etc. The French forces maintained in Algeria consist of an army corps numbering 53,306 men. In this are three regiments of Turcos and three of Spahis, which are recruited among the natives. There are also several French regiments of Chasseurs d'Afrique, and Zouaves Algériens, and a Foreign Legion. The cost of the colony to France has always been far greater than its revenues. In 1882 was annexed the district of **M'Zab**, estimated as containing 38,600 sq. miles, and pop. 50,000. Later came the invasion of Tunis (*q.v.*). (For further information consult Gaffarel's "L'Algérie," Playfair's "Handbook of Algeria and Tunis," Séguin's "Walks in Algeria," Tchibatcheff's "L'Algérie et Tunis.")

Alicante. See SPAIN.

Alice, Princess. Second daughter of the Queen, b. April 25th, 1843, married July 1st, 1862, the Grand Duke of Hesse-Darmstadt. Died in 1879 of diphtheria caught while nursing her children. She was distinguished for her learning and amiable qualities.

Aliens. According to English law every person born beyond the limits of the Queen's dominions, whose father or paternal grandfather was not a natural-born subject, is an alien. Such a person owes allegiance to the Queen so long as he resides within her dominions, but no longer. His status was formerly very different from that of a natural-born subject. He could neither inherit nor transmit real property; and if he purchased any the Crown thereupon became entitled to it. By the **Naturalisation Act, 1870**, aliens were empowered to take, acquire and dispose of property of every kind in the same manner as if they were natural-born subjects. But this Act does not qualify an alien for any office or franchise, or for any privilege or right of a British subject not thereby expressly given to him. Thus, it does not enable him to become the owner of a British ship. An alien may cease to be such either by denisation or by naturalisation. Denisation is by royal letters-patent, but does not enable the denizen to sit in the privy council or in either house of parliament, or to hold any office of trust, or to receive any grant of lands from the Crown. Naturalisation is either by Act of Parliament or by certificate of a secretary of state. An alien who has resided in the United Kingdom or been in the service of the Crown for not less than five years, and intends when naturalised to continue his residence or service, may apply for a certificate to any secretary of state, who will grant it upon receiving proper evidence in support of the application. Naturalisation

entitles an alien to all the rights and privileges of a British subject. A British subject not under any disability, and residing in any foreign state, who shall have voluntarily become naturalised in such a state, thereby becomes an alien. Any person born of a British father but out of the British dominions, or any person born within those dominions, but who at the time of his birth became under the law of any foreign state its subject, may make a declaration of alienage and so cease to be a British subject.

Alikhanoff. A Russian officer who gained great notoriety in the spring of 1885 by assisting General Komaroff to annex territory on the Afghan frontier. Born at Baku, on the Caspian, of wealthy Caucasian parents, he changed his native name of Ali Khan into Alikhanoff after leaving college, and entered the army. During the Khivan campaign of 1873 he fought under Skobelev, having the rank of captain. Afterwards he was made aide-de-camp to the Grand Duke Michael, Viceroy of the Caucasus. In 1879, for insulting his superior officer, he was reduced to the ranks and deprived of all his honours. He then volunteered to serve with General Lomakin's expedition against the Turcomans, and during the unsuccessful operations against Geok Tepe contributed to the *Moscow Gazette* a series of brilliant letters, which were subsequently published in English in "The Disastrous Russian Campaign against the Turcomans." Participating in Skobelev's campaign of 1880-81, he was raised to the rank of ensign, and the following year proceeded, disguised as a trader's clerk, with a caravan to Merv. Here he took a complete survey of the oasis, and laid the basis of the intrigues which, in 1884, resulted in the annexation of Merv. A clever artist, he furnished numerous picturesque sketches of Merv to Marvin's "Russians at Merv and Herat," in 1883. After his return from his caravan journey he participated quietly at Askabad in those military and political operations which finally ended with a sudden raid upon Merv in February 1884. By mingled force and persuasion the Tekkes were induced to yield, and for his success Alikhanoff received back his old rank of major and all his decorations. Later on he was made commander of the Merv military district, which post he holds at present. On Jan. 10th, 1886, the Order of St. George of the 4th class was conferred upon him by the Tsar.

Alington, Henry Gerard Sturt, 1st Baron (creat. 1876), was b. 1825. Was M.P. for Dorchester (1847 to July 1856), and for Dorset from the latter date till his elevation to the peerage.

Ali, Sheikh. See SOUDAN.

Alizarine. See WASTE MATERIALS, UTILISATION OF.

Alkali, etc., Works Regulation Act, 1881. This Act consolidates and repeals the Alkali Acts of 1863 and 1874. It is intended to abate the nuisances occasioned by the works to which it refers, and is divided into three parts. **Part I** deals with Alkali Works, and provides for (a) the condensation to the extent therein specified of the muriatic gas and acid gases of sulphur and nitrogen evolved in such work; the preventing, as far as possible, the discharge of all noxious or offensive gases evolved in such work; the keeping apart of acid drainage and alkali waste, and the use of the best means for preventing any nuisance arising from alkali waste. Any owner not complying incurs heavy

pecuniary penalties. **Part II.** deals with sulphuric acid works and other works specified in the schedule, and contains provisions corresponding to those in Part I. It also provides that an inspector may hold an inquiry to determine whether the discharge of noxious and offensive gases evolved in any particular salt or cement work can be abated at a reasonable expense, and that on his coming to an affirmative conclusion the Local Government Board may issue a provisional order requiring the owner to abate such discharge. **Part III.** provides for the registration of works affected by the Act; the appointment of inspectors (who must not be land agents or persons interested in any of the works or processes affected by the Act) empowered to enter the works affected and to make all necessary inquiries, and required to report through the chief inspector to the Local Government Board; and the making of bye-laws for the workmen by the owner of any of the works comprised in the Act. These bye-laws can be made only for the purpose of giving effect to the Act, and in order to be valid must be confirmed by the Local Government Board. In case of any violation of the Act, penalties are to be recovered in the county court. The sanitary authority may complain to the Local Government Board of any infringement of the Act, and the Board is thereupon to institute an inquiry.

Allen. See FENIANS.

"Allen, Grant." See NOMS DE PLUME.

Allen, Mr. Henry George, M.P., M.A. Oxon, was b. 1816. Educated at Rugby and Ch. Ch., Oxford. Called to the bar at Lincoln's Inn (1841); created Q.C. (1880); elected a bencher of his Inn (1881). He is J.P. for Carmarthenshire. Recorder of Andover (1857-72). Returned in the Liberal interest as member for Pembroke district (1880-85); Pembroke and Haverfordwest (1885).

Allen, Mr. William Shepherd, M.P., was b. at Manchester 1831. Educated at Wadham Coll., Oxford. He is J.P. for Staffordshire. Returned in the Liberal interest as member for Newcastle-under-Lyme (1885).

Alliance Israélite of Paris, The. See JEWS.

"Alliance News," The. See next article.

Alliance, The United Kingdom, for the "total and immediate legislative suppression of the traffic in intoxicating liquors as beverages," was formed in Manchester, June 1st, 1853. It owed its existence to the persistent efforts of Mr. Nathaniel Card, a member of the Society of Friends, who had been much struck with the beneficial effects of the Maine Liquor Law, passed in June 1851. The first meeting of the General Council was held Oct. 26th, 1853, when a constitution was adopted, and an executive council elected. Sir W. C. Trevelyan, Bart., was chosen president, an office he held till his death (March 23rd, 1879), when he was succeeded by Sir W. Lawson, Bart., M.P. A body of agents is appointed, with centres of operation in all parts of the kingdom. The *Alliance News* was first issued as the weekly organ of the Alliance, July 8th, 1854; the General Council in October 1857 adopted the draft of a Permissive Bill to enable localities to prohibit the traffic in intoxicating liquors; and this became the basis of the bill introduced into the House of Commons by Sir (then Mr.) Wilfrid

Lawson, and read a first time March 10th, 1864. This measure the Alliance supported with all its resources; and when, in the place of this bill Sir Wilfrid Lawson introduced his Local Option Resolution, March 11th, 1879, the Alliance rendered him no less vigorous aid. The public meetings of the Alliance have been almost unequalled for enthusiasm and magnitude; and besides its efforts to secure its own object—prohibition of the liquor traffic by popular consent—it has given friendly assistance to all kindred societies, and has circulated a large body of literature bearing on all branches of the temperance question. It has received the countenance of many distinguished men, including the late Lord Brougham, by whom it was designated "the Grand Alliance"; Bishop Temple, Cardinal Manning, Archdeacon Farrar, etc., etc. Its electoral policy has been attended with great success considering the political power of the liquor traffickers, by whom it is dreaded as their chief antagonist. Its annual receipts are greater than those of any other temperance association, being about £17,000. Among those who have been officially connected with it from the first are its Hon. Sec., Mr. S. Pope, Q.C., and its consulting Secretary, Mr. T. H. Barker. The editor of the *Alliance News* from the commencement has been Mr. H. S. Sutton. With the enlarged Franchise and Redistribution of Parliamentary Seats, the influence of the Alliance is likely to be greatly augmented.

Allison, Mr. Robert Andrews, M.P., of Scaleby Hall, Cumberland, was b. 1838. Educated at Rugby and Trin. Coll., Cambridge. Mr. Allison is a J.P. for Cumberland and a director of the Midland Railway. Returned as member for North Cumberland (1885) in the Liberal interest.

Allsopp, Mr. G. H., M.P. Educated at Eton and Trin. Coll., Cambridge. He is J.P. for the county of Stafford, and Chairman of the Burton-on-Trent School Board. Has been Mayor of Burton, and is connected with the firm of Samuel Allsopp and Sons, of Burton-on-Trent. Returned in the Conservative interest as member for Worcester (1885).

Allsopp, Sir Henry. See HINDLIP, BARON.

Allsopp, Mr. Samuel Charles, M.P., M.A. (Cantab.), was b. 1842. Educated at Harrow and Trin. Coll., Cambridge. He is Deputy Lieutenant for Staffordshire and J.P. Member of the Burton-on-Trent School Board. Deputy Chairman of the Great Northern Railway. Connected with the brewing firm of Samuel Allsopp and Sons, of Burton-on-Trent. Returned in the Conservative interest as member for East Staffordshire (1873-80); Taunton (1882-85); re-elected 1885.

"Ally Sloper." See NOMS DE PLUME.

Allotments, Small. It is a reproach to the Board of Trade that we have no detailed statistics of allotments furnished us since 1873. In 1875 and 1880 a classification of holdings was supplied, but in neither case did the lowest group distinguish the sizes of those below 50 acres, which were taken *en bloc*. [In 1871 a statement of the number and acreage of holdings under 20 acres was prepared, and in 1872 of holdings from $\frac{1}{4}$ acre to 1 acre and 1 acre to 5 acres, etc. In 1871 more than half of all holdings accounted for were under 20 acres (No. 211,000, acreage, 1,408,000 acres). In 1872, when larger

returns were collected, 160,570 holdings were under 5 acres each.]

Counties.	No. of Agricultural Labourers, Farm Servants, and Cottagers.	No. of Allotments.	Acreage of Allotments.	Average Size of Allotments.
			Acres.	Acre.
Bedford ...	14,749	8,364	3,206	0'38
Berks ...	18,638	5,007	1,146	0'23
Buckingham ...	13,277	8,612	2,203	0'26
Cambridge ...	20,994	9,596	2,501	0'26
Chester ...	16,558	929	248	0'27
Cornwall ...	15,393	1,762	283	0'16
Cumberland ...	8,579	410	46	0'11
Derby ...	7,672	5,628	798	0'14
Devon ...	29,282	7,062	1,814	0'26
Dorset ...	14,222	7,322	1,701	0'23
Durham ...	6,674	1,000	139	0'14
Essex ...	37,742	8,269	1,468	0'18
Gloucester ...	18,650	7,552	2,802	0'37
Hants ...	24,985	6,712	1,571	0'23
Hereford ...	11,123	997	192	0'20
Hertford ...	16,777	5,197	727	0'14
Huntingdon ...	6,782	3,376	1,035	0'31
Kent ...	38,901	4,150	741	0'18
Lancaster ...	26,286	992	102	0'10
Leicester ...	12,758	17,163	2,829	0'16
Lincoln ...	42,057	7,430	2,181	0'29
Middlesex ...	6,367	689	107	0'16
Monmouth ...	4,784	569	251	0'44
Norfolk ...	39,331	6,400	1,628	0'25
Northampton ...	19,269	16,477	4,294	0'26
Northumberland ...	8,349	968	148	0'15
Nottingham ...	13,312	11,317	2,104	0'19
Oxford ...	17,084	9,088	2,360	0'26
Rutland ...	2,901	1,252	327	0'26
Salop ...	18,159	1,002	230	0'23
Somerset ...	26,479	9,503	2,015	0'21
Stafford ...	15,666	5,444	1,116	0'20
Suffolk ...	35,515	11,664	3,442	0'30
Surrey ...	13,646	1,263	345	0'27
Sussex ...	28,654	2,782	519	0'19
Warwick ...	16,851	12,794	2,734	0'21
Westmoreland ...	2,994	52	6	0'12
Wilts ...	21,611	15,445	4,310	0'28
Worcester ...	13,620	4,919	1,908	0'39
York—				
East Riding ...	15,100	1,781	759	0'43
North Riding ...	14,833	4,731	1,240	0'26
West Riding ...	28,805	6,876	1,385	0'20
Total for England	761,928	242,542*	58,966	0'24

* i.e., altogether detached from cottages or other houses, the gardens of which are in no cases included.

Almeria. See SPAIN.
"A.L.O.E." (A Lady of England). See Noms DE PLUME.
Alternating Currents. See DYNAMO.
Alt Katholiken. See OLD CATHOLICS.
Amadeus of Savoy. See SPAIN.
"Amateur Casual, An." See Noms DE PLUME.

Amateur Geologists, Society of. See GEOLOGY.

Amati. See VIOLIN.

Ambassadors are diplomatic agents resident in foreign states, and representing by virtue of their **Letters of Credence** their own states. They are of three kinds, varying with the nature of their commissions: **Ambassadors** proper, **Envoys** and **Plenipotentiaries**, and **Chargés d'Affaires**. They, together with their servants, enjoy certain **privileges**—viz., exemption from process and arrest, and from taxation—which attach to ordinary foreign residents. An ambassador has also the right of audience of the king. On the death of either of the sovereigns between whom he negotiates, his commission lapses, but may be renewed.

Ambassadors, Foreign Ministers, Consuls, and Colonial Agents. The following is a list of the Ministers and Consuls in London of the principal Foreign States, and of the Agents of our most important colonies (revised to March 1st, 1886):—

Australia, South. *Agent-General*, Sir Arthur Blyth, K.C.M.G., 8 Victoria Chambers, Westminster, S.W.

Austria-Hungary. *Ambassador*, Count Karolyi, 18, Belgrave Square, S.W. *Acting Consul-General*, Chevalier Ferdinand Krapf de Liverhoff, Mansion House Chambers, 11, Queen Victoria Street, E.C.

Belgium. *Minister*, Baron Solvyns, 36, Grosvenor Gardens, S.W. *Consul*, M. François H. Lenders, 118, Bishopsgate Street Within, E.C.

Brazil. *Minister*, Baron de Penedo, 32, Grosvenor Gardens, S.W. *Consul-General in London*, Barão do Ibrá-Mirim, 6, Great Winchester Street Buildings, E.C.

Canada. *High Commissioner for the Dominion of*, Hon. Sir Charles Tupper, K.C.M.G., C.B., 9, Victoria Chambers, Victoria Street, S.W.

Cape of Good Hope. *Agent-General*, Sir Charles Mills, K.C.M.G., 7, Albert Mansions, Victoria Street, S.W.

China. *Minister*, Marquis Tseng, 49, Portland Place, W.

Denmark. *Minister*, M. de Falbe, 19, Grosvenor Square, W. *Consul-General*, Ernest Adolph Delcomyn, 5, Muscovy Court, Tower Hill, E.C.

France. *Ambassador*, M. W. H. Waddington, Albert Gate House, Hyde Park, S.W. *Consul-General*, M. Blanchard de Farges, 38, Finsbury Circus, E.C.

German Empire. *Ambassador*, Count Hatzfeldt, 9, Carlton House Terrace, S.W. *Consul-General*, Paul Ludwig Wilhelm Jordan, 5, Blomfield Street, London Wall, E.C.

Greece. *Chargé d'Affaires*, M. J. Gennadius, 57, Pall Mall, S.W. *Consul-General*, Alexander A. Ionides, 19, Great Winchester Street, E.C. *Ambassador*, Count Corti, 35, Queen's Gate.

Italy. *Ambassador*, Count Corti, Claridge's Hotel. *First Secretary and Chargé d'Affaires*, Chevalier J. Catalani, 24, Kensington Gate, S.W. *Consul-General*, Baron Heath, 31, Old Jewry, E.C.

Japan. *Minister*, Jushie Kawasé Masataka, 9, Cavendish Square, W. *Consul*, Mr. Sonoda Kokichi, 84, Bishopsgate Street, E.C.

Natal. *Agent-General*, Walter Peace, Esq., 21, Finsbury Circus, E.C.

Netherlands. *Minister*, Count von Bylandt, 40, Grosvenor Gardens, S.W. *Consul-General*, Jonkheer John W. May, K.N.L., 40, Finsbury Circus, E.C.

New South Wales. *Agent-General*, Sir Saul Samuel, K.C.M.G., 5, Westminster Chambers, S.W.

New Zealand. *Agent-General*, Sir F. Dillon Bell, K.C.M.G., 7, Westminster Chambers, S.W.

Persia. *Minister*, Prince Nazom Malcom Khan, 80, Holland Park, W. *Vice-Consul*, Walter Ellis, Esq., 30, Bedford Row, W.C.

Portugal. *Minister*, Miguel Martius d'Antas, 12, Gloucester Place, Portman Square, W. *Consul-General*, Anselmo Ferreira Pinto Basta, 3, Throgmorton Avenue, E.C.

Queensland. *Agent-General*, J. F. Garrick, Esq., C.M.G., Q.C., 1, Westminster Chambers, S.W.

Russia. *Ambassador*, M. G. de Staal, Chesham House, Chesham Place, S.W. *Consul-General*, M. Wladimir Weletsky, Great Winchester Street, E.C.

Serbia. *Minister*, M. Tchedomilli Mijatovich, 7, Gloucester Place, Hyde Park, S.W. *Acting Consul-General*, Mr. Christmas, solicitor, 76, Cannon Street, E.C.

Siam. *Minister*, Prince Narès Varariddhi, 23, Ashburn Place, South Kensington, S.W.

Spain. *Minister*, H. E. Don Cipriano del Mazo, 50, Onslow Gardens, S.W. *Consul-General*, Don Urbano Montejó, 21, Billiter Street, E.C.

Sweden. *Minister*, Count Charles Edward Wilhelm Piper, 47, Charles Street, Berkeley Square, W. *Acting Consul-General*, M. Carl Magnus Gustaf Björnstjerna, 34, Jermyn Street, W.

Switzerland. *Agent and Consul-General*, Henry Vernet, Esq., 25, Old Broad Street, E.C.

Tasmania. *Emigration Agents*, The Emigrant and Colonist's Aid Corporation (Limited), C. Dugald Buckler, Esq., Secretary, 36, Gracechurch Street, E.C.

Turkey. *Ambassador*, Rusdem Pasha, 1, Bryanston Square, W. *Ottoman Consulate-General*, Emin Effendi, 5, Union Court, Old Broad Street, E.C.

United States of America. *Minister*, Edward J. Phelps, Esq., 31, Lowndes Square, S.W. *Consul-General to Great Britain and Ireland*, Thomas M. Waller, Esq., 12, St. Helen's Place, Bishopsgate Street, E.C.

Victoria. *Agent-General*, Robert Murray Smith, Esq., C.M.G., 8, Victoria Chambers, S.W.

Ambassadors, Privileges of. See AMBASSADORS.

Ambrose, Mr. William, Q.C., M.P., was b. at Chester 1832. Called to the bar (1859); Q.C. (1874). Elected a Bencher of Lincoln's Inn (1881). Returned in the Conservative interest as member for Middlesex, Harrow Division (1885).

American Meat Supply. See MEAT SUPPLY.

American Organ. The distinctive peculiarity of this instrument as differing from the harmonium is that the reeds are reversed, and the wind drawn through the reed from above, by exhaust-bellows, instead of being forced from below in the usual manner. One result is a beautiful velvety softness of tone, if the reeds are of fine metal, as the pressure of the air is more equable than that of any spring; and another is great facility of expression, for the reeds, lying on top, are covered by shutters which can be raised by a simple knee lever, and the tone allowed to pass therefrom more or less freely into the outer air. These advantages, and a greater refinement and sweetness of tone, have caused the American organ rather to exceed the harmonium in favour. In America these instruments are usually known as parlour organs. Although we still retain the name

American organs, several English firms equ and some surpass the American manufacture who first invented this modification of the harmonium. Large instruments with pedals are often made for church practice.

Amherst, Mr. William Amhurst Tysser, M.P., of Didlington Hall, near Brandon, Norfolk, was b. 1835. Educated at Eton and Christ Church, Oxford. Is J.P. for Westminster, Middlesex, and Norfolk. High Sheriff of Norfolk (1866). Is a Deputy Lieutenant of Middlesex. Returned in the Conservative interest for South-West Norfolk (1885).

Amherst, William Pitt, 2nd Earl (created 1826), was b. 1805; succeeded his father in 1857. Educated at Christ Church, Oxford, where he was and class in classics (1827). The first Earl was Governor-General of India, upon whom and his heirs was entailed the pension of £3,000 a year, granted to the first Baron Amherst, a distinguished general. Died March 26th, 1886.

Amherst, William Archer Amherst, 3rd Earl (created 1826), b. 1836, succeeded his father 1886. Formerly Lieutenant and Captain Coldstream Guards. Deputy Lieutenant of Kent.

Ammonia, an instrument patented by Dr. Carter Moffat, through the use of which it is claimed the voice is materially strengthened by the inhalation of ammoniacal vapours contained in a tube specially constructed for the purpose. It is manufactured by the Medical Battery Company.

Amperé. See ATOMS AND MOLECULES.

Amphioxus, The. See ZOOLOGY.

Amphill, Oliver Arthur Villiers Russell, and Baron (created 1881), son of the 1st Baron; b. 1869; succeeded his father 1884. The 1st Baron (brother to the 9th Duke of Bedford) was a distinguished diplomatist.

Amyl Nitrite ($C_5H_{11}NO_2$) was first introduced as an anæsthetic by Dr. Richardson in 1863; obtained by acting upon purified amylic alcohol with nitric acid. It has a pungent aromatic taste, and the peculiar odour of jargonelle pear, for which it is sometimes substituted as a flavouring. Its effect (when inhaled in 3 to 5 minim doses) is to dilate the capillaries, flush the face and produce a sense of fullness in the head, quicken the pulse, and, in a full dose, to lower the temperature of the body 1° to 3° Fahr. A lethal dose lowers the pulse and temperature very considerably, and prevents the changes which give to arterial and venous blood their contrasting hues. It has been found of great benefit in relieving cardiac distress, particularly in angina pectoris, asthma depending upon heart disturbance, and syncope, and threatened death from chloroform inhalation, also in epilepsy and sea-sickness. It is said to eliminate uric acid from the blood, and may be therefore of great service in the treatment of gout.

Anarchism. The creed of those social revolutionists who believe that socialism can only be permanently conducive to human happiness when it can be established on a basis of complete individual freedom; that the coercion of man by man, including every form of government, is in itself immoral and injurious, and that the present industrial phase of social development, absolutely needless, save for the maintenance of monopoly. They aim, therefore, in preparing the way for voluntary association in production and consumption by the destruction of the organised state, with all the guaranteed it affords for the accumulation of wealth in the

lands of individuals. They hope, thus to put an end to the monopoly of property and every other artificial inequality, and to leave to the workers the free use of all means of production, whether natural or the result of past social labour. Anarchists are divided into **Mutualists**, who hope to bring about the above economic results by banks of exchange and a free currency; and **Communists**, whose motto is, "From every man according to his capacity, to every man according to his needs." Anarchist ideas were first formulated by Proudhon (1809—1865). They were professed by a large section of the "International," who seceded with Bakowine from the Social Democrats led by Karl Marx at the Congress of The Hague, in 1872. Since breaking up of the "International," several general congresses of the Anarchist party have been held, the most noteworthy being that of London (1881), which decided that as against the organised force of existing society all means are justifiable. In 1883 fifty-eight Anarchists, including the Russian refugee Prince Kropotkin (*q.v.*), were condemned at Lyons to fines and imprisonment on the pretext that they belonged to a non-existent International Working Men's Association. The party publishes a large number of newspapers, of which *Le Révolte*, 140, rue Mouffetard, Paris; *Die Freiheit*, J. Most, New York; *Liberty*, B. Tucker, Boston, U.S., may be taken as representative examples. Its views are also set forth in pamphlets by Kropotkin, Elysée Reclus, Dr. Gauthier, Bakowine, &c. English organ, *The Anarchist*, 35, Newington Green Road, N.

Anatomy, Comparative. See ZOOLOGY.

Ancestor Worship. See ANIMISM.

Ancient Law. See MAINE, SIR HENRY.

Ancient Lights. The right to the enjoyment of ancient lights is one of those known to English law as easements (*q.v.*)—that is to say, privilege not directly lucrative which the owner of one of two neighbouring tenements has over the other. It is a negative easement; being the right to continue to receive the light which one has heretofore received through one's windows. It may be acquired either by express grant, which must be by an instrument under seal, or by enjoyment for the space of twenty years, uninterrupted and not permissive. No infringement is deemed an interruption which has not been acquiesced in for one full year after the party interrupted has had notice of the infringement and of the person committing it. The permission alleged by the person who disputes the prescriptive right must have been in writing. The right is only to the quantity of light given or enjoyed, not to any quantity of light. But it is infringed whenever the amount of light so given or enjoyed has been perceptibly diminished, and the value of the premises thereby impaired. English law does not recognise any prescriptive right to the enjoyment of a prospect from one's windows. See "Gale on Easements.")

Ancient Monuments Protection Act, 1882. This Act empowers the owner of any of the ancient monuments enumerated in the schedule hereto to constitute by deed the Commissioners of Works and Public Buildings in Great Britain, the Commissioners of Public Works in Ireland, guardians thereof. Thereupon either acquires all powers necessary for the maintenance and preservation of such monument, but without detriment to any estate or interest in it previously enjoyed by the owner.

The Commissioners may purchase out of moneys granted for that purpose by Parliament any of the ancient monuments enumerated in the schedule. They may also accept a gift by deed or will of any of these monuments. They are to appoint inspectors whose duty it shall be to report on the condition and best means of preserving any of the scheduled monuments. Any person other than the owner who injures or defaces any such monument is made liable upon summary conviction to a month's imprisonment with hard labour. The schedule contains a list of about seventy ancient monuments or groups of ancient monuments scattered over the three kingdoms, and for the most part of Celtic origin. The list may at any time be enlarged by Order in Council.

Anderson, Rt. Rev. David, D.D., b. 1814. Educated at Exeter College, Oxford; graduated B.A. with honours (1836); M.A. (1838). Ordained deacon and priest (1837); Perpetual curate of All Saints', Derby (1848); Bishop of Rupert's Land (1849), receiving the D.D. of Oxford. Returning from his Colonial office, he was presented to the living of Clifton, (1864-81). Appointed Chancellor of St. Paul's Cathedral by the late Archbishop Tait (1866). Died November 5th, 1885.

Andrassy, Count Julius, b. at Zemplin, Hungary, 1823, the son of Count Charles, of an illustrious family of Hungary. He received the highest education, improved by his travels in Europe. In 1847 he was returned by the electors of his native place to the Hungarian Diet; and when, in 1848, the revolutionary movement broke out which ended in a general rising of the Hungarian nation against Austrian rule, Count Andrassy, throwing himself heartily into the national movement, was nominated administrator (or governor) of Zemplin, commanded the "Land-sturm" (or militia) of his native county, and was finally despatched on a mission to Constantinople by the Provisional Government. On the suppression of the Hungarian insurrection he was forced to leave his country, and lived at Paris and London till the amnesty of 1857, which enabled him to return from exile. When the defeat of Austria at Sadowa led the Emperor to enter upon the path of concession to the Hungarian aspirations, and a special Hungarian ministry was formed in consequence, Count Andrassy was made President of the Council and Minister of National Defence. In this capacity he was present at the coronation of the Emperor (Francis Joseph) as King of Hungary. He brought forward some legislative measures of the highest importance for the organisation and welfare of the country, and at the same time made a determined stand against the Radical party, which desired the complete separation of Hungary from Austria. In 1869 Count Andrassy was elected deputy for Pesth. In 1871 he became Minister for Foreign Affairs of the Austrian empire, and Comptroller of the Household, in succession to Count von Beust (*q.v.*), and Chancellor of Austro-Hungary. On his accession to office he despatched a note to the Austrian representatives at the courts of Europe in the interests of the general peace, and he continued to adapt his policy to this end. When the insurrection broke out in Bosnia and Herzegovina, in 1875, he addressed the well-known "Andrassy note" to the Porte, pointing out the reforms necessary to the safety of the Ottoman empire and the wel-

fare of its Christian subjects; to which note all the great Powers, with the exception of Great Britain, gave their adhesion. This note formed the key to the policy of the European governments; and on the final defeat of the Ottoman armies in 1878, and the conclusion of the treaty of San Stefano with Russia, Count Andrassy at once led the way in the proposal of a European Congress at Berlin (see **BERLIN CONGRESS**), in which, as chief plenipotentiary of Austro-Hungary, he took a leading and influential part, particularly in sustaining the views and action of the plenipotentiaries of Great Britain. He made vigorous preparations for the military intervention which Austria was called upon to undertake in Bosnia, etc.; at which the constitutional party in the state took umbrage, and at the expenditure it involved. Though supported by the Emperor throughout the party struggle which ensued, Count Andrassy retired from office in October 1879. He has not since taken an active part in public life, but is understood to have exercised his influence, in conjunction with Prince von Bismarck, in the direction of a closer union between Austria and Germany, and the extension of the Austrian dominions in the Balkan peninsula. The Emperor bestowed on him the Order of the Golden Fleece in January 1878.

Andrews, Mr. See **FIRE AND LIFE INSURANCE**.

Andromeda, New Star in. See **ASTRONOMY. Anemometer.** See **METEOROLOGY.**

Anglesey, Henry Paget, 4th Marq. (creat. 1815), was b. 1833; succeeded his bro. in 1880. The 1st Marquis of Anglesey commanded the cavalry at Waterloo.

Anglo-Chinese. See **CHINA.**

Anglo-Israelism. A theory which attempts to prove the ethnological identity of the English nation with the lost Ten Tribes, and thereby to claim for England the Biblical promises in favour of "Israel." Its votaries claim to number two million persons throughout English-speaking lands; among them many clergymen, an ex-bishop (colonial), and at least one lord, Viscount Folkestone, President of the Metropolitan Anglo-Israel Association (Palace Chambers, Bridge Street, Westminster). They at present support two weeklies, and encourage a considerable literature (catalogues by Messrs. W. H. Guest & Co., 29, Paternoster Row). The original founder of the theory was the late Rev. John Wilson, about 1840; succeeded by Mr. Edward Hine, whose "Forty-seven Identifications," "Flashes of Light," and other pamphlets seem to have had an extraordinary circulation. The chief arguments adduced to prove the identity are (1) the fact that the Scythians (and with them the Saxons and other ancestors of Englishmen) are first mentioned in history in the place where and at the time when the Ten Tribes were last heard of; (2) certain identities of custom between the early English or Britons and the Israelites, and traditions, chiefly Irish, of their migration from Bible lands; (3) suggested identities of English and Hebrew words, and the fact that many Englishmen bear Hebrew names; (4) the difference between the fate recorded against the Jews, or men of Judah, and the blessings promised to the remaining Israelites; (5) the literal fulfilment of the promises to Israel. This last is the chief argument on which Anglo-Israelites rely. It was promised that Israel should be a great nation, situated among "the isles," but spread

all over the earth, known under a different name and speaking an unknown tongue, and spreading God's truth throughout the world. What nation, ask the Anglo-Israelites, fulfils these promises unless it is England and her colonies? This movement is quite distinct from that entitled "**The New and Latter House of Israel**" (q.v.), a sect founded by Mr. J. J. Jezreel (né Smith) on certain mystic interpretations of Revelation, ch. vii., and having its headquarters at New Brompton, near Chatham.

Anglo-Jewish Association. See **JEWS.**

Angra Pequena. See **LUDERITZLAND.**

Aniline. See **WASTE MATERIALS.**

"Animals and Plants under Domestication." See **NATURAL SELECTION.**

Animism. The term applied by Dr. E. B. Tylor, author of "Primitive Culture," to express the general theory of spiritual beings. It consists, in brief, in the explanation of all natural phenomena by the medium of spiritual agency. From the earliest times man, in his simple nature, has personified the forces of nature and attributed what in these was inexplicable to the power of an indwelling deity. Hence with the Greeks and other nations of antiquity as also among less civilised peoples, natural phenomena were worshipped in a concrete form as gods (cf. the Egyptian sun-god, *Ra*, the Greek *Zeus*, Sanskrit *Dyu*, the sky, etc.). In the moral world the mysterious opposition of good and evil are personified in the system of dualism of the powers of light and darkness under the forms of *Ormuzd* and *Ahriman*, the good and evil spirits of Aryan Persia. Animism was, and is still in some countries, closely connected with social and domestic life. Disease are attributed to the presence of demons in the body of the patient, and the departed are considered to retain their sense of consciousness hence, in the neolithic and bronze burial mound the weapons and sometimes the favourite steed of the deceased were interred with him, being supposed to possess a shadowy existence, and to be available for the use of the departed spirit. A similar custom is current among the *Eskimos* who bury a favourite dog with a dead child to be its companion. Many other quaint customs traceable to the same source, might be adduced as, for example, the "hell shoon" (shoes placed on the feet of the dead) of the German peasant, the money placed in the hand of the corpse, an Irish wake, the cakes and sweatmeats laid on the graves at *Père La Chaise* on the feast of All Souls, and the rite of the *suttee*, etc. The intensity of the animistic idea is evidenced by the vast labour—considering the mechanical appliances at command—expended on the cairns (tombs constructed of stones), *dolmens* (storage tables constructed of three or four great upright stones with a top stone resting upon them), *menhirs* (long stones set up singly, common in India and Brittany), and *cromlechs* (stone circle as at Stonehenge and Avebury), by these monuments propitiating and doing honour to the ancestors. Ancestor worship is based upon as grows naturally out of the doctrine of animism. Cf. the *lares* and *penates* of the Romans, and the ancestor worship of the *Hindus* and *Chines* (Consult Sir J. Lubbock's "Prehistoric Times" and Dr. E. B. Tylor's "Anthropology" at "Primitive Culture.")

Annaly, Luke White, and Baron (creat. 1863), was b. 1829; succeeded his father 18; Entered the 13th Light Dragoons (1847); w. M.P. for Longford (July 1861 to March 186

and for Kidderminster (May 1862 to July 1865); was a Junior Lord of the Treasury (March 1862 to June 1866). The 1st Baron was M.P. for Dublin.

Annelida. See ZOOLOGY.

Annesley, Hugh, 5th Earl (creat. 1789), was b. 1831; succeeded his bro. 1874. Entered the army (1851); was wounded severely in the Kaffir war, and at the battle of the Alma; was M.P. for Cavan (1857-74); elected a representative peer for Ireland (1877).

Annular Atoll. See CORAL REEFS.

Andell, Richard, R.A., animal painter, d. April 20th, 1885. He was in his 70th year, and was a native of Liverpool. In 1840 he exhibited at the Royal Academy "Grouse Shooting" and "A Galloway Farm, the property of the Marquis of Bute." In 1857 he exhibited "The Water Carrier" and "Mules Drinking"; in 1858 "The Road to Seville" and "The Spanish Shepherd"; and in 1859 "Isle Major—Banks of the Guadalquivir." He was elected a Royal Academician (1870).

Anstey, F. See NOMS DE PLUME.

Anstruther, Sir Robert, M.P., was b. 1834. Late lieut.-col. Grenadier Guards. Lord Lieutenant of Fifehire and Deputy Lieutenant of Caithness. Returned in the Liberal interest as member for Fifehire (1864-80); St. Andrews Boroughs (1885).

Antananarivo. See MADAGASCAR.

Ante Meridiem. See PRIME MERIDIAN.

Anthropology. A branch of natural history which deals with the study of Man in his entirety. Its recognition as a distinct science dates only from the time when the geological evidence of the existence of prehistoric man came to be generally admitted. Relics of human workmanship, chiefly rudely chipped flint implements, are frequently found in high-level river-gravels and in bone-caverns, associated in both cases with the remains of the mammoth and other extinct mammalia in such manner as to prove their contemporaneity. The high antiquity of the human remains is inferred chiefly from the time taken (1) for the extinction of the associated species, and (2) for the river to cut down its valley to a great depth. The oldest indisputable remains yet found in Britain are certain flint flakes in the river brickworks of Crayford and Erith, in the Thames valley, associated with *Rhinoceros merhinus*, and believed to be of Miocene age (Prof. Boyd Dawkins, 1880). According to Prof. J. Geikie the river-gravels containing the old or palæolithic stone implements in south-east Britain are of mid-glacial, or even pre-glacial date; and Mr. S. B. Skerchley has reported the discovery of implements in beds which pass beneath the chalky boulder clay of Brandon, in Suffolk. On the Continent, discoveries of human relics in Miocene and even miocene deposits have occasionally been announced, but the evidence is not generally accepted in this country. The most reputed relics of man yet brought to light are certain chipped flints, some of which show the action of fire, discovered by the late M. Bourgeois in miocene strata, at Thenay, near Pontlevoy, in France. The French Association for the Advancement of Science has lately (1885) reopened the discussion of these Miocene flints; but opinion on the subject, even in France, is still divided. The study of prehistoric man may be termed **Archæological Anthropology**. Of other departments of an-

thropology, that of **ethnology** is the most important, and indeed this formerly constituted the chief part of the science of man. Ethnology deals with the racial characteristics of the human species. The classification of the varieties of man has always been beset with difficulties. One of the latest schemes of classification is that published by **Professor Flower** in the "Journal of the Anthropological Institute," May 1885. This scheme recognises (1) the **Ethiopian** or Negroid type, including the African Negroes, the Bantu, the Hottentots and Bushmen; the Oceanic Negroes, or Melanesians, and the Negritos of the Andaman Isles and New Guinea. (2) The **Mongolian** division, embracing the typical Mongols of Asia, the Eskimo, the American Indians, the Malays, and the brown Polynesians, or Kanakas. (3) The **Caucasian** type, which includes the Xanthochroi, or fair Europeans, and the Melanochroi, or dark races of S. Europe, N. Africa, and S.W. Asia. **Professor Huxley's** classification recognised two fundamental modifications of the human species—viz., the **Ulotrichi**, with crisp or woolly hair; including the Negroes and Negritos; and the **Leiotrichi**, with smooth hair, embracing the Australioids, Mongolioids, Xanthochroi, and Melanochroi. According to this ethnologist, the ancient Egyptians were a modification of the Australioid type, and the Melanochroi may have resulted from a mixture of the Australioid and Xanthochroic groups. The study of the differences in the anatomical structure of the various races of mankind falls under the denomination of **Physical Anthropology**. This branch also includes the comparison of the structure of man with that of the anthropoid forms of the lower animals, with the view of determining man's place in the animal kingdom. The scientific modes of measuring the human form and of testing the physical faculties of man constitute the department of **Anthropometry**. An **anthropometric laboratory**, under **Mr. F. Galton**, was open at the Health Exhibition of 1884, and a vast number of determinations were made on the visitors. The **British Association** appointed for several successive years an anthropometric committee, for the purpose of inquiring into the physical characteristics of the races of the British Islands. Their final report is published in the "Report of the British Association" for 1883. **Linguistic Anthropology** deals with so much of the science of language as bears on the intellectual growth of man and on the classification of races. The development of civilisation, or the evolution of culture, is another important branch of anthropology, which has been ably treated by Sir J. Lubbock, Gen. Pitt-Rivers, Dr. E. B. Tylor, Dr. J. Evans, and others. The first society devoted to the science of man in this country was the **Ethnological Society**, founded in 1843. Twenty years later the **Anthropological Society** was started, and in 1871 these two societies amalgamated, under the title of "**The Anthropological Institute of Great Britain and Ireland**." The Institute publishes a quarterly journal, and holds meetings on Tuesday evenings during the session at 3, Hanover Square (President, 1885, F. Galton, F.R.S.). The best sketch of general anthropology is to be found in Dr. Tylor's "**Manual of Anthropology**" (Macmillan, 1881). Travellers desirous of making anthropological investigations should consult the volume of "**Anthropological Notes**

and Queries," drawn up a few years ago by a committee of the British Association.

Anti-Aggression League. The, formed in February 1882, under the lead of Mr. John Morley and others, to check British interference in foreign affairs. It has had no influence nor effect of importance.

Anti-Cyclones. See METEOROLOGY.

Anti-Pyrogene. See FIRE EXTINCTION.

Anti-Semitic League. See JEWS.

Antiseptic Treatment is a method employed and directed against the development of fermentative micro-organisms, in order to prevent the process of putrefaction in wounds. Atmospheric ferments exert a special action upon all decomposable fluids, and furnish the conditions favourable to sepsis, whereby poisonous matters are set free, although they may be of themselves non-poisonous. Bacteria (*q.v.*) do not develop in perfectly healthy living tissues; even blood-clot in a wound, if left at perfect rest and not broken up, resists their action,—the blood of young persons resisting the process of putrefaction longer than that of the old; specific pathogenic organisms are not, however, so readily devitalised. That "bad air," overcrowding, and insufficient ventilation were the factors which brought about unhealthy wounds, erysipelas, pyæmia, and hospital gangrene, was long ago recognised, but no regular system was adopted whereby these baneful influences could be held in check and rendered harmless by such antiseptic means as have the power to prevent the inception of any but healing processes. Ambroise Paré, in the middle of the sixteenth century, employed turpentine in the treatment of gunshot wounds; since which time balsams, wine, alcohol, myrrh, benzoin, essential oils, and sulphate of copper have been employed as empirical remedies. Boerhaave, 1720, Bilgner, 1764, Benjamin Bell, 1784, and Abernethy in 1793, made use of these as antiseptics, aiming at the principles of preventing putrefaction in, and excluding the air from, wounds. John Pringle, in his "Observations on the Diseases of the Army," published in 1775, devotes a chapter to "diseases resulting from bad air," wherein he makes several attempts to determine the antiseptic powers of certain substances; but he had only vague surmises concerning the nature of the exciters of putrefaction. Later workers, Fr. Schulze, Schwann and Helmholtz, showed that putrefaction did not take place in a fluid exposed for a considerable time to a boiling temperature, and then brought into contact with air passed through sulphuric acid. Schröder, Dusch and Tyndall demonstrated that air filtered through cotton, thereby leaving behind the matters contained in it as dust, no longer set up putrefactive processes; and that when a condensed beam of light was passed through a flask in which the air had been previously strongly heated, it no longer reflected light, thus showing that the particles of dust were of an organic nature. Pasteur found that micro-organisms were unable to pass through tubes of bent glass, being caught in the curves; and that air which had become moteless by deposition of its dust caused no putrefactive development. Sir Joseph Lister showed that by previously heating a flask, which was furnished with two apertures, a large vertical neck and a bent lateral spout, to a temperature of 350° Fah. in an iron box, and filling the flask by a siphon

tube, fitted with a stopcock, the apertures being guarded by carbolised cotton-wool (1 part of pure carbolic acid to 100 parts of anhydrous ether, and allowed to dry) he could preserve infusions of turnip and hay, urine, etc., for any length of time. This experiment proves that not air alone, but that which is suspended in it, and is capable of being destroyed, is the cause of fermentative changes in these substances. Tyndall has also proved that gases, however foul-smelling, if free from particles of dust, do not produce fermentation in liquids such as boiled infusions of beef, sole, fowl, turnip, etc., which readily decompose if exposed to ordinary air. We are thus constrained to recognise the fact that air contains putrefactive ferments in more or less quantity, and that septic dust is nearly everywhere present (an exception being in air coming from the highest parts of large glaciers). And it is obvious that the secretions from a wound have in them such elements as are readily acted upon by these ferments. Subcutaneous surgery was practised early in this century by Abernethy, Sir Charles Bell, Dupuytren, Stromeyer, Jules Guérin, and others, with the effect of getting perfect healing without any inflammation or suppuration. Sir Joseph Lister directed his efforts to the exclusion of active ferments from the discharges of wounds, and argued that by so doing the wound would run a similar aseptic course. The universal presence of ferments in air and water would tend to prove that they must also be always present in the organism; but whether in a latent form, as believed by Billroth and Tiegel, or whether they are destroyed by contact with healthy tissues in the body, is at present an unsettled problem, though the latter is probably the correct view, because Pasteur, Burdon-Sanderson, Sir Joseph Lister, and Watson Cheyne have frequently succeeded in preserving from decomposition unboiled fluids and tissues, such as blood, urine, milk, egg-albumen, vegetable and animal tissues. The success of these experiments has not been invariable, and we may therefore conclude that micro-organisms are sometimes, though not frequently, present as active ferments in the vital blood, but that they are, as a general rule, surely and rapidly destroyed in it. When the vitality of a part is lessened by disease, injury, or an operation, so that its power of resistance to ferments is lowered, antiseptic surgery steps in to exclude these exciters of putrefaction until the reparative processes have restored the injured parts, the outer skin again become intact. Perfect asepsis can be looked for only when the skin is intact before an operation is commenced, but antiseptic treatment may be employed to correct the consequences of putrefaction, should such have arisen. Studious attention to the most minute details is absolutely necessary to insure success; every object which may, even indirectly, come in contact with the part to be operated upon must be regarded as a source of danger and rendered sterile by some antiseptic agent. Carbolic acid is most generally employed by Sir Joseph Lister. It is used undiluted for injection of nævi, etc., but frequently diluted with water, spirits of wine, olive oil, glycerine; a solution of 1-5 of spirits of wine to purify a wound which has been exposed to the air before treatment; carbolic oil 1-5 sometimes employed to very foul wounds, diluted 1-10 to dress abscesses and wounds.

those parts where putrefaction is most liable to occur; and further diluted 1—20 to oil catheters and instruments used for similar purposes. Carbolic acid and glycerine, 1—5 and 1—10, is used in preference to oil for dressing wounds, not being so readily washed away by discharges, but it is not so efficient where a lubricant is required. Carbolic lotion, 1—20 of water, is necessary to purify instruments and sponges, and 1—40 for ordinary purposes, such as washing the hands, etc. The carbolic spray is of 1—40 strength, but when this is projected by a steam spray-producer it is mixed 1—20, because the mixture with steam reduces it to 1—35, or thereabouts. Catgut ligatures, according to the plan of Sir Joseph Lister, are made by immersing an equal quantity by weight of the gut in a solution of carbolic acid 1—20, which contains also a small proportion of chromic acid, 1—4000; the effect of which is to render the ligature more resisting to absorption, so that erosion does not commence until about a fortnight after its application; this gut is kept ready for use, stretched on a reel, in carbolic oil 1—5. Carbolsized silk of various sizes for sutures is prepared by steeping it in carbolic acid and bees'-wax 1—10, wiping clean of the superfluous wax, and is to be kept in stoppered bottles; sutures should be immersed in carbolic lotion 1—20 immediately before being used. "Protective" is made by coating oiled silk with copal varnish, drying, and brushing over its surfaces with one part of dextrine, two of powdered starch, and sixteen of carbolic lotion (1—20); it is to be dipped in 1—40 just before being used; the wetting should spread uniformly over the surface, because, if this be not the case, dust may fall on the dry interspaces and not be purified by the acid: this protective is absolutely impermeable to carbolic acid, and is necessary to prevent the irritant effect of the dressing on the wound, the small amount of carbolic acid on its inner surface doing no harm. Carbolsized gauze is made of fine unbleached tarlatan, charged with one part of crystallised acid and four parts each of resin and paraffin, and specially prepared in a dry hot chamber; it must be kept in an air-tight tin box. Macintosh cloth is used in order that the discharges may not soak through the dressings at any point near the wound, thereby washing out the antiseptic and rendering the ingress of septic particles possible; it is to be applied with the indiarubber side nearest the wound, between the last two outer layers of the gauze, being thereby kept in its place. Sponges must be kept in 1—20 solution, and rinsed out in 1—40 before use; afterwards they should be immersed in water for some days, to disintegrate the fibrin, and then replaced for future use in 1—20 solution. Salicylic acid has been much praised by Professor Thiersch, of Leipzig, as being less irritating than carbolic acid. He uses a spray of 1—300 and a dressing of jute or wadding, impregnated by the acid in proportion of 3 and 10 per cent. by weight, a little glycerine being added to prevent the particles of the acid falling off. The objection to this acid is that it produces coughing and sneezing, but in some cases it may be preferable on account of the less irritation to the wound which is produced; it is on the whole, however, less reliable than carbolic acid. The method of use is much the same, except that in the place of protective, Thiersch uses perforated

gutta-percha paper or oiled silk, and dispenses with the macintosh. Sponges and instruments are cleansed by carbolic acid, however, as salicylic acid oxidises the steel. Generally the wool or jute is used in a dry state; but if the wound becomes inflamed, irrigation with salicylic lotion 1—300 is employed to soak the dressing. Thymol has been recommended by Ranke, of Halle, but has been abandoned by others as unreliable. Acetate of alumina ($\frac{2}{3}$ per cent. solution) has been used by Professor Maas and H. Fischer with good results in their hands. Eucalyptus oil is strongly advocated by Dr. Schulz of Bonn; it is soluble in alcohol and oil, and has very powerful antiseptic properties. Sir Joseph Lister has used gauze made of this oil, prepared in a similar way to carbolic gauze, and finds it less irritating to delicate parts of skin; but its greater volatility, and the danger of thus losing its properties, renders it less trustworthy than the carbolic gauze. Boracic acid dissolved in thirty parts of water is very useful as a dressing to superficial wounds, and in the form of lint, which has been impregnated by a saturated hot solution, is a very convenient application; it is also mixed with vaseline and paraffin to make an ointment. Mr. Barwell uses a solution in glycerine, boro-glyceride, with effect of getting primary union in many cases. Iodoform is a very excellent application to superficial ulcers and hæmorrhoids, causing no pain, but is not a potent germicide. Nélaton's practice was to soak charpie in camphorated oil and apply it in thick layers over wounds, keeping them wet and changing the dressing frequently, with exceedingly good results. Jonathan Hutchinson's method is to use alcohol and acetate of lead, diluted with distilled water, keeping the dressing constantly moist and changing daily, when the wound is generally found to heal by first intention. Coal tar was used as early as 1815, and by MM. Corne and Demeaux in the form of paste in 1858, and by Lemaire in 1860 mixed with saponine as a tincture, obtained from the bark of *Quillava saponaria*. Lemaire subsequently was the first to use carbolic acid extensively, and to recognise the truth of the germ theory as applied to wounds; but he seems to have worked on no systematic method in his treatment, and it was not until Sir Joseph Lister, who (independently of any knowledge of Lemaire's experiments) had been working with a definite object, and reducing the chaos of antisepticism to scientific order, that antiseptic surgery was brought to the position of a scientific discovery, and that high state of perfection which it has since attained. Corrosive sublimate (mercuric perchloride) first recommended by Dr. Koch, has been used in Germany by impregnating pine-wood wool with $\frac{1}{4}$ per cent. each of the sublimate and glycerine; but although this is highly absorbent, such large masses have to be employed that they are very unwieldy as a dressing. Corrosive sublimate has lately been tried by Sir Joseph Lister in the form of gauze, 1 per cent. strength, and found to possess such antiseptic properties as no other agent is ascertained to have; but, in his first operation for the removal of a breast, he noticed that where the serous discharge came in contact with the gauze dressing there was a total absence of irritation, whereas in other parts the skin was covered with vesicular pustules. Recognising this fact, and wishing to use a less bulky dressing than that of the

German surgeons, he found by mixing serum obtained from horse's blood with 1 per cent. of the sublimate, and impregnating the gauze with this, thus charged, it retained a powerful antiseptic virtue and did not produce any irritation of the skin: even a 2 per cent. sero-sublimated gauze may be used in the majority of cases, but should any sore arise, the milder gauze must be substituted: sixteen layers of it are used as a dressing. Sir Joseph Lister believes that the mixture of albumen with the sublimate does not form an albuminate, but simply a mechanical mixture, and that this is much less irritating than a watery solution. Serum which has been passed through a gauze containing sublimate does not undergo decomposition, though inoculated with putrefying materials. Further researches into the properties of mercurials are still being carried on by Sir Joseph Lister. The method of employing the carbolic antiseptic treatment in an operation, such as the amputation of a limb is,—the patient being anæsthetised, the limb (if injured or diseased, enveloped in carbolised tow below the seat of amputation) should be raised to a vertical position to empty the vessels, a tourniquet or Esmarch elastic band applied, all instruments and every requisite that may possibly be wanted properly rendered aseptic by complete immersion for some time in carbolic lotion 1—20, the hands of the surgeon and assistants washed and the nails brushed in 1—40 (a higher strength causing numbness), the skin about the seat of operation purified by washing with carbolic lotion 1—20, or when necessary enveloped in a towel saturated with this for a few minutes, another towel, similarly impregnated, being placed in a handy position to receive the instruments which are in use, and so arranged that the cloud of spray may fall upon it, the spray apparatus being located at a convenient distance to play continuously upon the part; the limb being removed, vessels which are bleeding secured by catgut ligatures, drainage tubes inserted in the angles of the wound and cut off flush with its edges, which are then brought together with sutures, the deep dressings are applied: firstly, the protective, dipped in 1—40 solution, then several layers of gauze, similarly wetted and completely overlapping the protective, all inequalities being filled up with the loose shreds; the dry carbolised gauze, consisting of eight layers, with a piece of macintosh (the rubber side towards the wound), being placed between the two outermost layers, the whole being of sufficient size to envelop the limb for 10 or 12 inches, is then fixed by a gauze bandage, over which an aptly fitting elastic bandage is applied, and the whole secured in the proper place by means of safety-pins. This dressing is usually changed on the following day (similar precautions being always taken), because the action of the carbolic acid generally produces a copious flow of serum from the fresh cut edges of the wound, which might wash away the antiseptic and thus render the ingress of organisms possible. Dressings are afterwards changed at intervals, according to the circumstances of the case. If, during the progress of an operation, the surgeon should remove his hands from the influence of the spray, or touch any object not carbolised, he must re-dip them. A carbolised linen guard should be provided to cover the wound temporarily, if the spray should cease from any cause. Some surgeons dispense with the spray, and

wash out the wound with carbolic lotion 1—40 but great caution is necessary, especially in removing and cleansing the drainage tubes, or dust-laden air may rush in to the deep parts of the wound; they must be removed under cover of the guard mentioned above. In some internal abdominal operations, such as the removal of an ovarian tumour, it is better perhaps to dispense with the spray at the time of operation; but it may be used to purify and by its rain-cloud, settle the dust in the air of the apartment previous to the operation, every other antiseptic precaution being scrupulously taken. In all cases perfect asepsis, free drainage of all fluids from the wound, and complete rest of the part, are the means by which success is most likely to be secured. Antiseptics are now very generally used in the department of obstetric surgery and midwifery, with the effect of diminishing the mortality from puerperal fever and other septic diseases.

Anti-Socialistic Law. See GERMAN POLITICAL PARTIES.

Anti-Vaccination. This name is loosely applied both to the opinions of those who are convinced of the worthlessness of vaccination in itself, and of others who, while either favourable or indifferent to vaccination oppose enforcing it by penalties against anti-vaccinators proper. **Against vaccination** itself it is urged (1) that it does not *prevent* small-pox, as shown by—(a) In 1871 91·5 per cent. of the patients of the Highgate Small-pox Hospital, and in 1881 96 per cent., had been vaccinated, at a time when only 90 per cent. of the London population was claimed as vaccinated: (β) In the small-pox epidemic of 1871, the first 173 cases in Cologne and the first 224 in Leignitz had all been either vaccinated or re-vaccinated, thus showing that small-pox can and does *originate* among the vaccinated (2) That it does not *mitigate* small-pox, since (a) in Scotland in 1871 there died of small-pox 517 vaccinated infants in the first year of life and therefore within an average of six months of their vaccination, these alone being one tenth of the total victims in that country (β) In the same epidemic in Cologne the mortality amongst vaccinated infants was 8 per cent. of cases; amongst unvaccinated infants it was 66 per cent. (3) That vaccination is itself a grave danger to life and health, as proven by (a) the great increase, since the enforcement of vaccination by law, in infant mortality from diseases confessedly inoculable—skin diseases having increased 187 per cent., scrofula 259 per cent., syphilis more than 30 per cent., in children in the first year of life whilst the fatal cases of vaccino-erysipelas—which between 1859 and 1869 averaged 8 annually—rose to an average of 27 between 1870 and 1880; (β) That for the three years 1881-3 the deaths of 178 children have been registered as due to "cow-pox and other effects of vaccination," a number large in itself, but certainly no approach to the truth (γ) That in August 1882 a public inquiry held at Norwich found that 4 children had died at 5 more were seriously diseased through vaccination in the preceding June. **Against the enforcement of vaccination by law** it is urged (1) That sanitary measures succeed where vaccination fails; as in Leicester and Keighley, where vaccination is almost entirely neglected, and where small-pox is practically unknown. (2) That vaccination either (a) protects you from

taking small-pox, or (β) mitigates it when you have taken it, or (γ) does neither of these things. Now, if it neither protects nor mitigates, then it is useless, and every one will admit it ought not to be enforced by law. If it only mitigates, then, since the mildest small-pox is admittedly as contagious as the most severe, vaccinated small-pox is no less dangerous to the community than unvaccinated; therefore there is no reason, and therefore no right, to enforce vaccination by law. If the doctrine be that it protects you from taking small-pox, those who believe this doctrine will go and be vaccinated, and then, being themselves safe, have no reason, and therefore no right, to enforce vaccination upon others by law. (3) That a law compelling a choice between money and the love of children can only fail to be demoralising when it ceases to be effective. For further information apply to Mr. W. Young, Secretary of the London Society for the Abolition of Compulsory Vaccination, 77, Atlantic Road, Brixton, London, S.W. (For arguments on the other side, see VACCINATION.)

Anti-Vivisection. The movement against vivisection has assumed such dimensions that a history of its advances, even a brief one, is quite out of the question in the space at our disposal. We will therefore content ourselves with recapitulating the principal reasons alleged against the practice. The view that experiments should now be permitted because anaesthetics can be administered to prevent the animal suffering any pain is erroneous. The experiment is not of the slightest value during its performance,—a perfect experiment can only be made when the animal is in its normal condition, and an experiment made while the animal is insensible is of little or no value. Again, there is a numerous class of operations in which anaesthetics cannot be used, as they would interfere with the correctness of the result. Here the objection based upon the infliction of torture comes in. So far have experiments on animals been from advancing medicine or surgery in man, that on the contrary they have been pernicious to the healing art. They are unnecessary, for clinical and pathological observation yield the teaching required in practical medicine. The effect of these experiments on spectators and performers is pernicious. The administration of chloroform places the organism of the animals in abnormal conditions; and as before stated no experiment is of any value unless the subject experimented on is in a normal state. There are now many other methods of research available than the practice of vivisection. Experiments on human beings are advocated for the reason that those on animals are unsatisfactory as regards the application of their results to man. For the same anaesthetics, the same drugs and poisons, and the same parasites, do not act upon man and animals in the same way. The action of belladonna, for instance, is not the same in human beings and rabbits; nor that of hemlock the same as with goats, or horses, or sheep; nor that of cantharides as with hedgehogs; nor that of prussic acid the same as with frogs; nor that of opium the same as with pigeons; nor that of digitalis as with frogs; nor that of elaterium as with jackals; nor that of strychnia as with fowls; nor, most important of all, that of chloroform as with dogs. No single instance can be adduced in

which vivisection has derived any practical benefit, either to suffering humanity or to the lower animals themselves, from such experiments. Assuming that by such means benefits to mankind could be obtained, the opponents of the practice hold that the evil results on the human mind would counterbalance any such benefits. The Vivisection Act is objected to by the antivivisectionists on the following grounds:—(1) Its principle—it authorises and legalises cruelty. It is alleged that under the express sanction of this Act there have been performed in England experiments surpassing in cruelty all but the very worst of Continental vivisections, and equal to any even of them. (2) Its working.—Its opponents state that in a large measure it is a delusion. The inspectors appointed under the Act are themselves either medical men or men of science. They are in complete sympathy with the vivisectionists. They do not "inspect." They take the vivisectionists' own account of their experiments and their own estimate of the amount of pain their experiments occasion. Hence the official reports contain nothing but vague generalities, completely misrepresenting the real state of affairs. Whilst acknowledging that the necessary formalities connected with procuring a licence do limit to a certain extent the number of vivisectionists, they say that a licence once granted affords no protection whatever to the animals against the infliction of the most dreadful agony, and that the system tends to beget in the public mind a feeling of false security. (See also VIVISECTION.)

Antwerp Quays. See ENGINEERING.

"Ape." See NOMS DE PLUME.

Apia. See SAMOA ISLANDS.

Apothecaries, The Worshipful Company of. See CITY GUILDS, THE.

Appleton, Dr. C. E. See ACADEMY.

Apple Trees. See FRUIT FARMING.

Aquaculture. See IRRIGATION.

Aquarium, Royal (Westminster). This limited liability company was established in 1874, under the management of Mr. Wybrow Robertson and Mr. A. Bedborough. The building was formally opened by H.R.H. the Duke of Edinburgh on January 22nd, 1876. A theatre—**The Imperial**—was added in 1879.

Arachnida. See ZOOLOGY.

Arbitration, Board of. See TRADES UNION.

Arbitration and Conciliation, Board of. See MINING.

Arbitration and Peace Association, The International. See next article.

Arbitration, International. The principle of the substitution of arbitration for war in the settlement of international disputes has always been insisted upon as perfectly practicable by members of the **Peace Society** and all who sympathise with them. On the other hand, it has been ridiculed as the dream of enthusiasts, which the infirmity of human nature would render impossible of realisation. How, it was asked, were the decisions of the arbitrators to be enforced? If the parties concerned in the dispute refused to accept the judgment of the arbitrators, how was war to be avoided? Mr. Cobden was among the first who put the matter in a definite shape, when, on June 13th, 1849, he proposed in the House of Commons an address to the Queen praying her to direct the Foreign Secretary to enter into communication with foreign powers inviting them to concur in treaties binding each to refer all future mis-

understandings which might arise, and which could not be settled by negotiation, to the decision of arbitrators. His suggestion was that each country should be bound, on a misunderstanding arising with another, to appoint commissioners to consider the points in dispute, and, if they could not agree, to select an umpire whose decision should be final. He did not suggest any means for enforcing these decisions; nor did he approve the notion of having a court of appeal, with an army to support its decisions. That might lead to more armed interference than at present. He urged, however, that any country which, having accepted an arbitration treaty, had violated it, would be placed in so infamous a position that he doubted whether any nation would enter into war on such bad grounds as that country would occupy. The motion of Mr. Cobden was rejected by the House of Commons by a large majority. The friends of arbitration, however, point to the fact that on July 8th, 1873, **Mr. Henry Richard** (*q.v.*) carried a motion favourable to the principle, as evidence of the steady growth of public opinion on the subject. At a conference of the friends of peace, held at Brussels in October 1873, the **International Arbitration and Peace Association** was founded, and has since been energetic in disseminating information on the subject. This body binds itself to no particular scheme for carrying the principle into practice. Its general aim is best expressed in a resolution passed at the **Cologne Conference** (Aug. 1881), wherein a hope is expressed "that the time is not far distant when all civilised governments will unite to make arbitration a permanent and authoritative part of the law of nations." Yet some of its leading members seem to regard the ultimate establishment of a permanent Court of Nations for the settlement of international disputes as the most feasible solution of the problem. In proof that the principle of arbitration is perfectly practicable, its friends point to the fact that it has been successfully applied in at least thirty-six instances, ranging in date from 1794, when a dispute between **Great Britain and the United States** was thus arranged, to 1882, when **Holland and Hayti** similarly settled an irritating quarrel by friendly consultation. There is also the serious disagreement which occurred between **Spain and Germany** (1885) as to the claim of the former to the sovereignty of the **Caroline Islands** (*q.v.*), and which was amicably arranged by the mediation of the **Pope** (*q.v.*)—perhaps the only instance in modern times when His Holiness has been called in to adjudicate on an international quarrel. Addressing his constituents in 1883, **Sir Charles Dilke** (*q.v.*) pointed out that, while in each of the previous five decades there had been but one case in which a dispute between the United Kingdom and a foreign power had been referred to arbitration, in the decade between 1870 and 1880 no fewer than seven disputes had thus been successfully referred. Probably, however, the **United States** has taken the most prominent part in pushing forward the principle of arbitration. **Presidents Grant** (*q.v.*), **Hayes**, and **Garfield**, were all very strongly in favour of having it engrafted on the law of nations. The first-named gave practical proof of his convictions when in **China**, in 1880, he exerted himself successfully to arrange the dispute between **China and Japan** as to the sovereignty of the **Loohoo Islands**, which had at that time all but involved the two

countries in war. **Italy**, at the instigation of **Signor Mancini**, has also done much in giving practical effect to the principle of arbitration. In 1878, Signor Mancini being then Foreign Minister, Italy was negotiating treaties of commerce with other countries; and in each of these, numbering in all some eighteen or nineteen, a provision was introduced binding the contracting parties to refer any difference that might arise in regard to these conventions to arbitration. One of the treaties thus concluded was with **Great Britain**. Some years ago **Switzerland** proposed to the **United States**, to **Mexico**, and to the **Central and South American Republics**, to enter into an arbitration convention for thirty years; but nothing would appear to have resulted from it. There is, however, a treaty existing between the **United States of Columbia**, in **South America**, and **Honduras**, in **Central America**, binding each to submit to arbitration whatever dispute cannot be arranged diplomatically. It is to the promotion of such treaties that the friends of arbitration appear to be more especially devoting their energies. **Great Britain** has had no small share in pushing into prominence in recent years the doctrine of international arbitration. Of the thirty-six cases referred to in which arbitration had been successfully resorted to from 1794 to 1882, England was a party in fourteen. Chief and most important amongst these was that of the dispute concerning the **Alabama Claims**, which, commencing in 1865, was not concluded until 1873. The initial question in dispute was whether **Great Britain** had the right, according to international law, to recognise the **Confederate States** as belligerents at all; and next, whether sufficient vigilance had been exercised to prevent the sailing of the Confederate cruiser the **Alabama**, which had been built in this country. Two fruitless conventions were signed and rejected. Then a joint commission met at Washington, in 1871, and succeeded in concluding what is known as the **Treaty of Washington**. In the same year the arbitration tribunal met at **Geneva** (*q.v.*); but the **United States Government** made a demand for compensation for indirect losses caused by the **Alabama**, and the proceedings were thus interrupted for some time. Finally the arbitrators declared these invalid; they were withdrawn; and the damages awarded, in September 1872, amounted to £3,229,166 13s. 4d. The sum originally claimed by the **United States** was £9,476,166 13s. 4d. Great indignation was expressed in this country at the act of arbitration itself, and the amount of the award, which was said to be excessive. The friends of arbitration, however, pointed out that, even if this country had to pay more than it was strictly entitled to do, yet it was infinitely cheaper than war could have been; and that it was better to concede even some of our strict international rights than to incur the lasting enmity of the **United States**. A good understanding between the two countries, they held, was worth procuring, even at the price of £3,000,000. The ownership of the **Island of San Juan**, lying near **Vancouver's Island**, and commanding the straits between **British Columbia** and the **United States territories**, had also become a burning question between the two countries, and it was referred to the arbitration of the Emperor of **Germany**, who decided in favour of the **United States** in 1872. That did not at the time tend to strengthen the love

Englishmen for international arbitration; but the subsequent **Mixed Commission**, which met to inquire into all the outstanding claims made by subjects of Great Britain upon the Government of the United States, and *vice versa*, awarding £400,000 to the former, slightly reconciled them to such methods of arranging international quarrels. On the whole it would appear that the principle of international arbitration is slowly gaining ground, though yet far from coming within the sphere of "practical politics." The last conference on this subject that has been held was that at **Milan**, on September 12th, 1883, when many congratulations were exchanged on the advances that had been made in the application of the principle.

Arbitration, Judicial. By a judicial arbitration is here meant an arbitration which will be enforced by the courts of justice. Such an arbitration may take place either by consent of the parties interested, or in consequence of a reference by order of a court. (1) **Arbitration by consent.** The parties to a dispute having submitted to an arbitration may agree to make their submission a rule of court. The Court thereupon makes a rule that the award given in the arbitration shall be conclusive. The appointment of the arbitrator thenceforward cannot be revoked without leave of the Court. The Court may command witnesses to attend before the arbitrator. They may be examined on oath, and by giving false evidence make themselves liable to the penalties of perjury. A party not complying with the award commits a contempt of court. An award corruptly made will be set aside by the Court, upon application made within a certain time; otherwise no objection can be made by either party, except in respect of defects apparent on the face of the award itself. (2) **Arbitration in consequence of a reference made by the Court.** The Court may at any time in the course of an action refer to an arbitrator matters of mere account which cannot conveniently be tried in the ordinary way. In this case the arbitrator is really a judge by delegation. Whenever it is necessary for determining whether any item should be allowed or disallowed, a special case may be stated by the arbitrator for the Court either at his own discretion or by order of the Court. The reference of certain matters arising in the course of an action by the Court to an official or special referee is not quite the same thing as judicial arbitration.

Arc de Triomphe. Occupies the centre of the circular Place de l'Etoile, Paris, from which twelve beautiful boulevards radiate, each in a perfectly straight line. Its erection was ordered by Napoleon the First, after the battle of Austerlitz. The foundation stone was laid August 15th, 1806, and inaugurated July 20th, 1836, under the reign of Louis Philippe. The monument and its surroundings constitute one of the finest sights in Europe.

Archæan. See GEOLOGY.

Archbishops, English. See CATHEDRALS.

Archdeacons, sometimes contracted to **Archdeans**, have equivalent yet subordinate jurisdiction to the bishop, whom they assist in all duties not strictly episcopal. They visit the clergy. The Courts of Archdeacons exercise general or limited jurisdictions, in accordance with the terms of their patents or with local custom.

Arch, Mr. Joseph, M.P., was b. at Barford, Warwickshire, in 1826. In early life was a

Primitive Methodist local preacher. Founded the National Agricultural Labourers' Union (1872). Returned in the Liberal interest as member for North-West Norfolk (1885).

Arches, Court of. The ecclesiastical courts of England are of four degrees. First and lowest is the court of the archdeacon, from which an appeal lies to that of the bishop. Second comes the bishop's Consistory Court. The third is the Court of the Metropolitan, whether of Canterbury or of York. The fourth and highest is the Judicial Committee of the Privy Council—the final court of appeal, which represents the Queen in her character of head of the Church of England. The Metropolitan Court of Canterbury is known as the Court of Arches, because it was formerly held in the Church of St. Mary-le-Bow, styled in Latin *Sancta Maria de arcubus*. The judge of this Court, the deputy of the Archbishop, is called the **Dean of the Arches**. He receives and determines appeals from all the inferior ecclesiastical courts within the province of Canterbury. He also hears many suits which have never been brought before any inferior court; the inferior judge, who should in the ordinary course have tried the case, having waived his jurisdiction by what are called letters of request. Moreover, certain parishes in the province of Canterbury are under the direct jurisdiction of the archbishop. Such causes arising in these parishes as would elsewhere have been originally heard in the court of the archdeacon or bishop are determined by a branch of the Court of Arches known as the Court of Peculiars. (See "Stephen's Commentaries," vol. iv., pp. 310, 311, and the authorities therein cited.)

Arc Lamps. See DYNAMO and ELECTRICITY.

Arctic Exploration. Although numerous voyages into the Arctic regions were made by Norsemen and others many centuries ago, the real work of Arctic exploration and discovery may be said to have been carried on during the last three hundred years. What may really be termed the first expedition of which we have cognisance, sailed in 1553 under Sir Hugh Willoughby and Richard Chancellor, its declared object being "the search and discovery of the northern parts of the world, to open a way and passage to our men, for travel to new and unknown kingdoms." Nova Zembla was discovered; but while Willoughby and his men unfortunately perished on the coast of Lapland, Chancellor landed at a point where Archangel now stands, and was able to proceed overland to Moscow. This expedition, notwithstanding the fatality which attended it, stimulated Arctic exploration by demonstrating its practical utility. Henceforth, voyage after voyage was undertaken at intervals, each contributing more or less important additions to the sum of geographical information respecting the Arctic area. Frobisher's expedition, which sailed in 1576, was the first which actually sought to find the north-west route to India,—a search which was prosecuted by some of the most distinguished navigators of the succeeding three centuries. Frobisher was followed by Davis; and during the next thirty years Barentz, Waymouth, Hudson, Button, and Baffin continued the work of discovery, some of them associating their names with the geographical features of the Arctic regions. The means at the disposal of these daring navigators render the results of their voyages most remarkable. Frobisher's largest vessel was one

of twenty-five tons, and several of his successors in the sixteenth and seventeenth centuries carried on their work with means that seem positively ridiculous in the present day. The incorporation of the Hudson's Bay Company in 1670 was followed by important discoveries in the extreme north of the American continent; many of the Company's servants having greatly distinguished themselves, from the days when Hearne and Mackenzie revealed the secrets of the Coppermine and Mackenzie rivers to the time when Rae penetrated the mystery which shrouded the fate of Franklin's expedition. During the last century the Dutch and the Russians entered heartily into the work of Arctic exploration; and the trade associated with the Hudson's Bay enterprise, as well as that connected with the Spitzbergen fisheries, developed as the work of discovery went on, and demonstrated the practical value of Arctic labours. A new era in the history of Arctic exploration may be said to have commenced after the close of the great war in 1815. We then come to the period when Buchan and Franklin, Ross and Parry, Back and Beechy added so materially to the store of general knowledge regarding the Arctic regions. A law was passed in 1818 offering a reward of £20,000 for making the north-west passage, and another reward of £5,000 was offered for reaching 89° N. Two expeditions were equipped, one to go north by Spitzbergen and the other by Baffin's Bay; the former under Captain Buchan and Lieutenant Franklin, and the latter under Captain John Ross and Lieutenant Parry. No particular results, however, were obtained, except to confirm impressions derived from previous voyages, to reveal the existence of valuable fishing grounds, and to indicate directions in which further work should be carried on. In 1819 Sir Edward Parry was intrusted with the command of an expedition which proceeded through Lancaster Sound and onwards for three hundred miles to what is now known as Melville Island. Unable to penetrate the Polar pack, the expedition returned in October 1820; but in May 1821 Parry again sailed in the same direction, making numerous discoveries before he returned in 1823. Meanwhile Franklin, with Back, Richardson and Wood, explored some hundreds of miles of coast-line on the northern shores of America. In 1827 Parry attempted to reach the Pole by way of Spitzbergen, and attained the most northerly latitude reached until it was exceeded by the last of our national expeditions, under Sir George Nares. Captain John Ross, accompanied by his nephew James, started on a private expedition, and made various discoveries, the most remarkable of which was the position of the magnetic pole. After the lapse of several years, during which various nationalities promoted Arctic explorations, the ill-fated expedition of Sir John Franklin left our shores for the purpose of making the north-west passage; and subsequent voyages down to that of the *Alert* and *Discovery*, under Captain Nares, were mainly undertaken in connection with the search for Franklin, of whom no tidings had been received since he disappeared within the Arctic circle. Sir James Ross was sent out in 1846, but returned the following year without news. Subsequently a search was instituted in two directions—by way of Behring's Straits and by way of Baffin's Bay. Collinson and M'Clure took the former course

in the *Enterprise* and the *Investigator*, while the *Assistance* and the *Resolute*, under Captain Austin, went in the other direction. The chief feature of these expeditions was the work done by sledge parties; but no sign of Franklin's expedition was discovered, while the *Investigator* became imbedded in the ice, from which she was never extricated. In 1852 another expedition was fitted out under the command of Sir Edward Belcher, in the *Assistance*, with Captain Kellett in the *Resolute*. Much sledge work was again done; but the great feat which signalled this expedition was the rescue of M'Clure and the crew of the *Investigator*, who were found by Lieutenant Bedford Pim, after a sledge journey that occupied a month, and conducted to the *Resolute*. In addressing the Royal Geographical Society some time afterwards, Sir Roderick Murchison said that Lieutenant Pim had undoubtedly saved the lives of Sir Robert M'Clure and those who were with him in the *Investigator*. In 1854 Dr. Rae, while exploring in the neighbourhood of King William Land, obtained not only tidings but relics of the Franklin expedition; and the indication thus afforded led to the elucidation of the great mystery by Sir Leopold McClintock. Sir John Franklin was found to have died in 1847, and not one of his companions who sailed in the *Erebus* and *Terror* ever returned from that fatal quest. But the search for Franklin had resulted in the discovery of seven thousand miles of coast-line, as well as in other very large and valuable additions to our geographical knowledge. Franklin's fate created a deep feeling of sympathy in America, and more than one expedition was fitted out by Americans for purposes of search. These expeditions, and others which the thirst for Arctic discovery subsequently produced, yielded valuable results. Dr. Kane made discoveries in the region of Smith Sound; Dr. Hayes took the same direction in 1860; while Hall, after getting actually on the Franklin expedition's line of retreat, took the *Polaris* in 1871 for two hundred and fifty miles up the channel from Smith Sound. Of late years, Norwegian and Swedish explorers have done good service in the neighbourhood of Greenland, Spitzbergen, and Nova Zembla. The Austro-Hungarian expedition, under Lieutenant Weyprecht and Lieutenant Payer, endeavoured in 1871 to make the north-east passage by way of Nova Zembla; but although they did not succeed in this object, they made important geographical discoveries during the three years of their sojourn in the Arctic regions. Franz-Josef Land was made known by them, and numerous islands and bays were discovered. The last of our national expeditions to the Polar regions was despatched in 1875, under the command of Captain Nares. The *Alert* and the *Discovery* were equipped in the hope that the expedition might actually result in the discovery of the Pole itself; but while the *Alert* reached a more northerly latitude than any other vessel ever attained, while Commander Markham planted the British flag at the most northerly point ever reached by man, it was found impossible to get to the Pole, and the expedition returned. But various discoveries of much interest and value were made, and a vast region was explored. Sir Allen Young and Mr. Leigh Smith afterwards organised private expeditions, and penetrated into the Polar area; but the most remarkable feat of

later years was that of Professor Nordenskiöld, the veteran Swedish explorer, who actually succeeded in making the north-east passage without injury to his ship or the loss of a single life. Less fortunate was the expedition which Mr. Gordon Bennett despatched into the Arctic regions by way of Behring's Strait. Lieutenant De Long, who was in command, and several of his crew, perished from exhaustion and want of food, after his vessel had been crushed in the ice, but others of the expedition were fortunate enough to reach Irkutsk. The last of the American expeditions was that of Lieutenant Greely, which commenced its work in 1882 at Lady Franklin Bay. The party spent two winters in taking observations and examining the region; but although relieving vessels were despatched no succour reached the explorers, who endured such great hardships that only a few of them survived. Ultimately, Lieutenant Greely and six companions were found just alive; and the record of their experiences constitutes one of the most harrowing stories ever recorded in the annals of Arctic exploration.

Ardilaun, Arthur Edward Guinness, 1st Baron (creat. 1880), was b. 1840. Was M.P. for Dublin (June 1868 till Feb. 1869), when he was unseated, and Feb. 1874 till March 1880). His father, Sir Benjamin Guinness, was the well-known brewer, and head of the firm of Arthur Guinness and Co., Dublin; was created a baronet for his liberality in restoring St. Patrick's Cathedral, Dublin.

Argentine Republic. A group of states formerly known as the United Provinces of the River Plate. The constitution, identical with that of the United States, vests the executive power in the hands of a president, elected for six years by the fourteen provinces, and the legislative authority in that of a Senate chosen by the provinces, and a House of Deputies, one deputy for every 20,000 of population. The various provinces elect their own legislators, and have complete control over their internal affairs. The State religion is Roman Catholic, but all others are tolerated. Education is in rather a backward state—about one pupil to twenty-eight inhabitants. Area, including Patagonia, 1,124,086 square miles. Pop. 2,952,763. Revenue £6,492,000 in 1884; expenditure about £6,452,000. Debt about £51,000,000, not including railway guarantees and the internal debts of the various provinces. Army about 7,300 militia, and national guard stated to be 350,000. Navy, three iron-clad and about thirty other vessels. Since 1870 little of note has occurred, beyond the insurrection of General Mitre in 1874 at Buenos Ayres, which was finally suppressed in 1876. Further disputes with Buenos Ayres, the chief province of the Confederation, arose in 1880, which were finally composed by appointing Buenos Ayres the capital of the Republic. In 1884 the capital was removed to La Plata, a new site lower down the river, with a good harbour. State of country prosperous, number of settlers increasing yearly, and great extension of railways.

Argyll, George Douglas Campbell, P.C., 8th Duke of (creat. 1701); Baron Sundridge and Hamilton (1766), by which title he holds his seat in the House of Lords; K.G. (1884). Was b. 1823; succeeded his father in 1847; Lord Privy Seal (Jan. 1853), and Postmaster-General (Nov. 1855); again Lord Privy Seal (June 1859 to July 1866); Secretary for India, and President of the Council of India (Dec. 1868); the third

time Lord Privy Seal (1880 to April 1881); is Hereditary Master of the Queen's Household in Scotland, and Hereditary Sheriff of Argyllshire, Chancellor of the University of St. Andrews (1851); Rector of the University of Glasgow (1854); is chief of the great family of Campbell, and a lineal descendant of the "MacCullum More." Has written several works, amongst which may be noticed the "**Reign of Law**."

Aristotelian Society. A society established in 1880, under the presidency of Mr. Shadworth H. Hodgson, the philosophical writer. It holds periodical meetings, at which papers are read by members and discussed.

Arithmometer. A patented machine, invented by Mr. A. Sonnensohn, for rendering visible and tangible all numbers from 1 to 1,000,000, by means of wooden "cubes" (1 cubic centimetre), "staves" (1 decimetre long = 10 "cubes"), "plates" (1 sq. decimetre = 10 "staves" = 100 "cubes"), "boxes" (1 cubic decimetre = 10 "plates" = 100 "staves" = 1000 "cubes"), and three folding frameworks representing respectively 10, 100, and 1000 "boxes," all parts being marked with black and white "cubes." The final framework (= 1,000,000 "cubes" or cubic centimetres) is of course 1 cubic metre.

Arkiko. See RED SEA LITTORAL.

Armitage, Mr. Benjamin, second son of the late Sir Elkanah Armitage, of Salford, was b. 1823. Is a manufacturer at Manchester, and has been President of the Manchester Chamber of Commerce; J.P. for Lancashire. Returned in the Liberal interest as member for Salford (1880-85); re-elected (1885).

Armoured Ships of England and France. See NAVY, THE BRITISH.

Armourers, The Worshipful Company of. See CITY GUILDS, THE.

Armstrong Guns. See ARTILLERY.

Army. The definition by Johnson, to be "a collection of armed men obliged to obey one man," is not quite satisfactory. The essential characteristic of an army which distinguishes it from other assemblies of armed men is its organisation. An army of the present day differs as much from an army of ancient times as a printing machine from an early flint axe. Armies of some kind have existed at all periods. The profits of industry, with the civilisation and refinement which result from them, would never have been possible without the means of defending them. No country has been able to throw its full energies into peaceful pursuits unless it were able to sustain war. The art of war is divided into two branches: one relates to the manner in which armies are raised—their composition and their government; the second to the mode in which they are used in war. The first is known as the administration or organisation of armies; the second is treated of under the head of strategy, tactics and operations of war. This article deals only with armies in a state of rest. In the first stages of civilisation every nation was an army, every man a warrior. As division of labour becomes necessary a portion of the males are specially devoted to military service. Standing armies are thus created. It is hardly necessary even to glance at the ancient armies of Egypt or Persia, nor need we dwell upon the famous Greek phalanx or the Roman legion. To the last in turn each of the former yielded. With the fall of Rome darkness fell upon military organisation, as well as upon

other arts. The barbarians who overthrew the empire were in the condition from which the Latins had risen ten centuries before, and some ten centuries elapsed before highly organised armies again appeared. The military system of the Teutonic races was broad and national. In their assemblies the freemen appeared armed, ruled by elected leaders. Encouraged by the presence of their women, the Teutonic army was literally the armed people; yet even then there was a bodyguard or personal following of the king or leader. After migration to England, the system continued. Every landholder by law was obliged to serve in the popular levies or *fyrd*. *Fyrd*-*bot* was one portion of the *trinoda necessitas*. Arrayed by the sheriff, the *fyrd* was simply the county in arms. Still the West Saxon kings relied also upon the services of their personal retainers, who formed a bodyguard of trained soldiers, called *thegns* or *comites*. As the thegns lived more on their estates, and only served the over-lord occasionally, the thegnhood became untrustworthy. Canute revived a standing bodyguard of professional soldiers instead of the thegns, in his *huscarls*. Such was the old English military system; in it was the germ of the English army, which has, in the nineteenth century, marched to Paris and Pekin, to Madrid and Candahar; and of our modern militia, as well as of feudal levies and permanent mercenary troops. The Norman Conquest increased the feudal element by extension of tenure through military service, and by the division of the land into **Knight's Fees**, held on condition of furnishing a heavy-armed horseman for forty days in the year. Such armies were unfit to carry out campaigns, as the soldiers could quit the ranks after forty days' service. Henry II., to carry on the war in France, raised from his feudal tenants a tax instead of personal service, and levied scutage on each "knight's fee." He was thus able to raise Flemish and Brabançon mercenaries, who, bound to their leader by good pay and the rough loyalty of the soldier, were efficient military instruments. The result of paid service was a much larger proportion of the lower classes in the ranks. These were Englishmen, not Normans, and were educated from infancy in the use of the longbow. England, less than a century after the Norman conquest, was a land famous for archers. But mercenaries were expensive; so the French kings of our country sought, by continuing the *fyrd* system, to retain the services of a body which supported the Crown against the feudal barons. William the Conqueror exacted from every freeman the old national oath to defend the king, his lands and his honour, both at home and beyond sea. Thus the militia was continued; and the repulse of David of Scotland, at Northallerton, was due to its valour and patriotism. Henry II. relied for foreign service mainly on paid troops raised by scutage of the barons, but trusted to the *fyrd* for home defence. His assize of arms (1181) reorganised that body, and compelled every citizen to possess an armament appropriate to his station in life. Mercenaries misused by John attempted to control the kingdom during the minority of his son. An assize of arms was re-issued by Henry III., in connection with the system of watch and ward. Edward I. (1285) further developed the system in the Statute of Winchester. His successors

continued reforms. The soldiers who under the Plantagenets carried the English standard to Paris and Orleans, and under the Tudors garrisoned Flushing and Sluys, were all paid men; but to preserve internal peace and resist invasion, every Englishman had still to provide his arms and fall-in in the array. As the longbow was laid aside, and complicated firearms introduced, it was found that the yeoman's time and life were all he could give in his country's cause, and the cost of weapons and ammunition must be defrayed by local taxation. Hence the interest of the ratepayers was to reduce the number of fighting men; and when invasion by the Armada was threatened, the state of the English militia makes us rejoice that the fate of the country was decided on the stormy waters of the Channel instead of on the hills beside Blackheath. In the time of James I., parliament repealed to a great extent the series of statutes which enforced on each citizen the obligation of keeping arms. The Artillery Company of London sprang from a voluntary association in the reign of Henry VIII., and the trained bands which this Act of James I. substituted for the mediæval militia, though to a certain extent a continuation of the *fyrd*, were largely of voluntary origin. The militia question caused some of the greatest difficulties, in 1642, between Charles I. and his parliament. The part taken by the trained bands in the civil wars caused parliament, on the Restoration, to reorganise the militia and place it closely under the Crown. Till the middle of the eighteenth century the militia was, however, neglected. Then the absence of the regular army, on the Continent, caused it to be revived as an organisation for defence and as a recruiting field for the army. Under George III., and during the present reign, various acts of parliament have modified the militia laws; and latterly the militia has been brought into close relationship with the standing army—the militia battalions being formed into auxiliary battalions to each regiment of the line. Service in the militia is nominally compulsory, but the ballot is practically never enforced. For internal defence the militia has been at various times supplemented by volunteers. The Artillery Company is an early example of this force. At the beginning of this century the fear of an invasion by Napoleon led to about half a million of men enrolling themselves in volunteer regiments, but when the Napoleonic wars ceased the movement died out. In 1859, threats on the part of some French officers led to the formation of a more permanent volunteer force, which has continued to flourish, and which now musters about 240,000 citizen soldiers. By an Act of 1863 this organisation is legally established, and volunteers when called out are placed under military law (see VOLUNTEERS). —A permanent standing army did not exist in England till the time of Henry VII. The contest which went on with France from the time of Edward III. to Henry V. was carried on by forces composed to a small extent of feudal tenants, and largely of forced levies of pressed men, raised by contracts made with some great noble or experienced general, who agreed to serve the king abroad, with so many men, at a fixed rate. The pay was very high, and there was no difficulty in raising the men. The contract generally ended with the war; so that these armies, although composed of

skilled soldiers, were not permanent. Penalties for desertion and mutiny were inflicted by statutes, which anticipated the Mutiny Act. The origin of the present standing army is found in the yeomen of the guard, instituted by Henry VII., and the small regular garrisons of Calais, Dover, and Berwick. Forced loans, billeting, and martial law, all connected with the maintenance of the army, formed the main substance of the "*Petition of Rights*." Cromwell naturally encouraged the force which had raised him to power. For the first time a real standing army, mustering 80,000 men, was maintained in England, and was the most efficient fighting machine ever known in English history. After the Restoration several regiments of Cromwell's army were still maintained. At first these only numbered 3,000 men, but were gradually increased. The abolition of the feudal levies was sanctioned by parliament in the reign of Charles II. This made a standing army more necessary. James II. increased his guards and garrisons; and although the standing army was extremely unpopular, the French war which the accession of William and Mary caused, prevented its disbandment. Only with difficulty was an army of 7,000 men retained after the peace of Ryswick. The debates on that occasion decided the question. Thereafter England has always had a standing army. The constitutional difficulty was got over by passing an annual *Mutiny Act* (*q.v.*), which alone empowered the sovereign to govern the troops by martial law. This was annually passed until, during the last ministry of Mr. Gladstone, in 1883, a permanent *Army Discipline Act* was adopted. The numerical strength of the army has steadily increased. In 1750 it was about 19,000; in 1777, 90,000; reduced in 1792 to 17,000. In 1812 nearly a quarter of a million of men were under arms, but this was reduced very materially on the conclusion of the Napoleonic wars. Up to this time it had been the custom to raise troops in time of war, and to disband nearly the whole of them on the conclusion of peace. The Crimean war, in 1854, showed the faultiness of this system. The great successes of the German armies, in 1866 and 1870, drew attention to the want of organisation and the want of reserves in England. Army reforms were undertaken when Lord Cardwell was Minister of War. The *system of purchase* of commissions was abolished in 1871. Short service and a system of reserves were established about the same time. The standing army of England is raised entirely by voluntary enlistment, and in this respect differs from every Continental force. The *effective military strength* of our country consists at the present time (Estimates 1886-87) of:—Regular troops enrolled, Home and Colonial, 141,284; Militia (including reserve), 141,333; Volunteers, 254,038; Regular troops (Indian), 68,196; First reserve, 51,000; Second reserve, 5,900; Yeomanry, 14,405.

Arnold, Mr. Matthew, the eldest son of the Rev. T. Arnold, D.D., head master of Rugby, was b. 1822. Educated at Balliol Coll., Oxford, where he graduated. Elected a Fellow of Oriel Coll. Private Secretary to Lord Lansdowne (1847); Lay Inspector of Schools under the Council of Education (1851); published a number of poems, and was made Professor of Poetry at Oxford University. Was sent as Foreign Assistant Commissioner to inquire into

the system of education in France, Germany, and Holland (1859), on which he published a memoir (1861); visited the Continent again (1865), on the part of the Royal Commission on Middle Class Education, to procure information as to such schools, and published a work on the subject (1867); wrote a work on Celtic Literature (1868), as well as several volumes on religious and other topics. Had the degree of LL.D. conferred upon him by the University of Edinburgh (1866), and that of Oxford (1870). Made a Commander of the Crown of Italy by the King for his care of the young Duke of Genoa, who resided in his family while pursuing his studies in England.

Arnott, James Moncrieff, F.R.S., d. June 3rd, 1885. He was b. 1794, and educated at the High School and University of Edinburgh. He was for many years surgeon to Middlesex Hospital and the North London Hospital, and also Professor of Surgery in King's Coll. and University Coll., London. In 1840 Mr. Arnott was nominated one of the Council of the Royal Coll. of Surgeons; he was elected a Fellow (1843), and later on became a member of the Court of Examiners of that body, of which he had twice been elected to the presidency. In 1860 he was elected representative of the College in the General Council of Medical Education and Registration of the United Kingdom.

Arran, Arthur Saunders William Charles Fox Gore, 5th Earl of (creat. 1762); Baron Sudley (1884), by which title he holds his seat in the House of Lords; b. 1830; succeeded his father 1884. In the diplomatic service (1859-64), and a Commissioner of Customs (1883-4).

Arrest of Peers and Members. See PRIVILEGES OF PEERS AND MEMBERS.

Arrondissement. (From the French.) Extent of French territory under the administration of a sub-prefect (*sous-prefet*); also a portion of a town having its own civil officers. An *arrondissement*, as it is understood in France, may be compared to an English district; when it applies to the portion of a town, it is similar to an English parish or ward.

"Arrow" Case. See CHINA.

Arthropoda. See ZOOLOGY.

Arthur, General Chester A., late United States President; b. 1831, at Albany, in New York State. He became the President at the death of President Garfield, who fell by the hand of the assassin (see GUITEAU). He is the son of a Baptist minister, and was educated at Union College, Schenectady, where he graduated with distinction. He commenced studying law at the Albany Law School, and afterwards commenced business in partnership with Mr. E. D. Culver, and soon made himself celebrated in the legal profession. As a public man, he was foremost in impeaching the right of masters to ship slaves from the border states, and in his advocacy that coloured people should be allowed to ride on the cars; in both cases he was successful. In the War of Secession he was appointed Quartermaster-General of the State of New York. When the war was concluded he again resumed practice, Mr. Philips, the District Attorney of New York, becoming one of the firm. In November 1872 President Grant appointed General Arthur Collector of the Port of New York, an office he held until July 1878, when he was removed by President Hayes, under pretext that he was opposed to the reform of the civil service inaugurated by

President Garfield—viz., that he was in favour of re-electing the holders of all offices of the civil service whenever a new president is appointed. Guiteau shot President Garfield for the avowed purpose of causing General Arthur, then Vice-President, to become President, and thus bring the "Stalwart" party into power. His elevation to the Vice-Presidency was the result of a concession made to that section of the republican party of which Mr. Conkling is the leader. In politics, General Arthur has always taken a leading part in the movements of the republican party. He retired from the presidential chair (March 4th, 1885), on the nomination of Mr. Grover Cleveland (*q.v.*) as President of the United States.

Artillery. This word is used to describe—(1) The officers and men who work and superintend guns and their appurtenances in the way of ammunition, carriages, and stores; (2) To describe the *matériel* of artillery—that is, the guns and all appliances and stores with which these have to be worked. A mechanical form of artillery has existed from very early times. The Old Testament mentions "engines invented by cunning men to shoot arrows and great stones." Roman armies were equipped with battering rams, catapults, and balista; but artillery in the sense in which we use the term dates only from the invention of gunpowder. Although vague allusions are made to the earlier employment of artillery, the first clearly recorded use of it in Europe was by Edward III. of England, in the fourteenth century. He formed an artillery train, which at the siege of Harfleur consisted of gunners and servitors. Some tactical progress had been made by the end of the fifteenth century, and Louis XII. owed his successes in Italy to this arm. Under Henry VIII. the field guns were falcons, falconets, and sakers, and the artillery train included ammunition, wagons, pontoons, and artificers. The heavy pieces were culverins. In the parliamentary wars artillery was little used, and was so difficult to move that guns had often to be left behind; and even in the field they were so immobile that a flanking attack paralysed their action. It was only on the Continent in the seventeenth century that Gustavus Adolphus gave artillery its first true influence in war. He invented cartridges, and Swedish guns did great service in the Thirty Years' War. The development of science, which was marked in England by the incorporation of the Royal Society, under Charles II., had naturally its influence on such a scientific arm as the artillery. Our artillery was reorganised in 1682, ten years after a manufacturing establishment had been instituted at Woolwich. James II. prepared to meet and oppose the invasion of William of Orange with an important artillery train. William himself formed the first regiment of artillery. The Duke of Marlborough was appointed Master-General of Ordnance on the accession of Queen Anne, and is said to have used his artillery with great effect at Blenheim and Malplaquet. The Royal regiment of artillery was first permanently established in 1716, under Albert Borgard. An academy for the instruction of cadets was established in the Warren at Woolwich in 1741. In 1748 a company of artillery went to Pondicherry, and became the nucleus of the Indian artillery, which again was rejoined to the Royal artillery in 1862, after the Indian mutiny. At

the beginning of that outbreak the Indian artillery mustered 65 Europeans, and 66 batteries with 524 field guns. A great improvement in artillery was made by Frederick the Great, who created horse artillery. He made three great improvements in the mode of handling guns. He used them in small batteries at important points in the line of battle, instead of keeping them only in the centre or on the flanks as formerly. He used guns to open the battle and protect the deployment of columns, and altered the position of his batteries according to the course of the action. Until the end of the eighteenth century, in most armies, guns had been attached to battalions of infantry. In 1791, in France, horse artillery was established, batteries of six guns were introduced, and regimental guns shortly abandoned. Napoleon, himself an artillery officer, used field artillery, which was made very movable, with great effect in his new tactics. To make it movable a driver corps of soldiers was organised in 1800, and the old system of horsing guns by contract was abandoned. When British troops were sent to the Continent in 1793, guns were still dispersed amongst the infantry, and could only move at a walk, but the example of our enemies was followed. Horse artillery was introduced, and the driver corps established. Regimental guns were abolished in 1802, and batteries of six guns formed. Shrapnel shells were invented by Major Shrapnel in 1803, and Sir W. Congreve perfected his rocket in 1806, which gave the British artillery some advantage. Horse artillery were usually armed with five 6-pounder guns, and one 5½-inch howitzer; field batteries with 12-pounder guns and one howitzer. The British artillery did good service during the wars against Napoleon, but on their conclusion was terribly reduced, and at the time of the death of the Duke of Wellington it was with great difficulty that sufficient guns could be collected to fire the salute at the funeral of a field-marshal. But the approach of the Crimean war caused an augmentation of both field and horse artillery, which nevertheless were found entirely insufficient during the Crimean campaign and the siege of Sebastopol. In 1858 drivers specially enlisted were attached to each field battery. In 1859 the regiment of artillery, which had now risen to 15 battalions of field and garrison artillery and 1 brigade of horse artillery, was reorganised and divided into horse, field, and garrison brigades. After the amalgamation of the Indian artillery, in 1862, the strength of the royal regiment was 5 horse and 25 field and garrison brigades. The Royal regiment of artillery includes the whole of the British artillery. It musters about 1400 officers and 33,500 men, who are distributed in more than 200 batteries of horse, field, and garrison artillery. These are proportioned into 6 brigades of horse, 12 of field, and 13 of garrison and the coast brigade. The proportion of guns to men in the British army is at present about 2½ guns per 1000 men, which is thus below the usually accepted strength of 3 per 1000. It has been proposed that the regiment of artillery should be broken up into smaller units, and that field should be separated from garrison artillery; but as yet no decision has been arrived at on these points. Great changes were made in the tactical use of artillery in the campaign between France and

Germany of 1870-71. Indeed, it may be said that until that war the proper employment of artillery had never been exhibited. Then guns were, for the first time, pushed boldly into action. Attacks were commenced with a concentrated fire of artillery, which covered the offensive movement of infantry, and held the enemy in check till the flanking movements, so much adopted by the German army, could be carried out. At Sedan the German guns were pushed forward without any heed of escort, even in front of the advanced guards, and enclosed the French army in a circle of fire. Napoleon used to mass his guns at the crisis of an engagement, to strike a decisive blow. Now they are assembled early in the action, to render attack possible. The artillery of advanced guards is much increased, and a great proportion of the guns march close to the head of the columns. As soon as the enemy is felt in force, batteries are pushed to the front boldly, and concentrate their fires. Frequent change of position is to be avoided, but guns should always be kept within effective range. Within little more than a quarter of a century, great changes have been made in the *matériel* of artillery. **Rifled guns** were used by the British artillery at the siege of Sebastopol, but with little effect. In the 1859 campaign rifled field guns were used by the French artillery against the Austrians. These attracted much attention, and **Sir Wm. Armstrong** invented breech-loading rifled guns, which were sent out to be used in the China campaign of 1860. **Armstrong guns** were adopted by the field artillery generally, but a long and bitter controversy ensued between the advocates of the breech-loading rifled guns and **muzzle-loading rifled guns**, which terminated in the latter being adopted; but this is now apparently about to be reconsidered, as measures are being taken for re-arming the field artillery, at least, with breech-loading guns. At the present time (March 1886) the whole of our artillery may be considered to be undergoing a change. The principal guns for field artillery will in future be **breech-loading rifled guns**, probably throwing a projectile of 16 pounds, which it is estimated will give a velocity of 2000 feet per second. Of **garrison guns** there are at present in the service 25, 40, and 64-pounder muzzle-loaders, with 8-inch, 6.6-inch, and 6.3-inch howitzers. **Naval guns** are required for piercing armour. These principally consist of the 16-inch gun of 80 tons, 12-inch of 35 tons, 10-inch of 18 tons, and 9-inch of 12 tons. To oppose naval guns, and pierce the armour of ironclad vessels, there are for land service the 17-inch gun of 100 tons, 16-inch of 80 tons, 12.5-inch of 38 tons, 10-inch of 18 tons, 9-inch of 12 tons, and others. Besides these there are guns for fortresses, and siege train guns. **Projectiles** consist of **Palliser's chilled shot**, common shells, and Shrapnel shells. Since the war of 1870 machine guns have been developed. These fire a rapid succession of bullets from a stand. In that war **mitrailleurs** were employed, and obtained fair success. **Gatling**, **Nordenfeldt**, and **Hotchkiss** guns have now been invented and adopted. These all require only two or three men to work them, and throw in a fire equal to that of a considerable detachment of infantry.

Artillery Company. See ARMY.

Artillery, Royal Regt. of. See ARTILLERY.

Artists, Musicians, and Actors Deceased, (1886-Mar. 1886). See OBITUARY, APPENDIX.

Arundel of Wardour, John Francis, 12th Baron (creat. 1605); was b. 1831; succeeded his father 1862. Is a Count of the Holy Roman Empire.

Aryans and Democracy. See DEMOCRACY.

Ascension Day. See HOLY THURSDAY.

Ascham Society, a small body of educationists and men interested in pedagogy, meeting chiefly for social purposes. Its members include Professors Tyndall, Huxley, Morley, Mr. J. A. Froude, Sir John Lubbock, and Sir Frederick Leighton.

Ascidioda, The. See ZOOLOGY.

Ascot Cups and Stakes. See RACING.

Ashbourne, Lord, P.C., 1st Baron (creat. 1885), b. 1837, formerly Mr. Edward Gibson, who was, with the above title, the late Lord Chancellor of Ireland, is a native of Dublin. Graduated with high honours at Trinity Coll., Dublin, and (1875-85) was elected to represent the University of Dublin in parliament. Called to the Irish bar (1860), and for years practised in Ireland, and gained a high reputation in his profession. On entering parliamentary life as one of the members for his University, he took a prominent part in all the important debates which have taken place during the last ten years, rendering valuable service to the Conservative party, to which he attached himself. Mr. Disraeli early took note of the fine capacities displayed by Mr. Gibson, and appointed him Attorney-General for Ireland (1877-80). In the debates on the Irish Land Act of 1881 he took a prominent part. Lord Ashbourne brought into the House of Peers the Holdings Act (Ireland), which has become law.

Ashburnham, Bertram Ashburnham, 5th Earl of (creat. 1730), was b. 1840; succeeded his father 1878. The 4th Earl was a celebrated collector of manuscripts.

Ashburton, Alexander Hugh Baring, 4th Baron (creat. 1835), was b. 1835, and succeeded his father 1868. Was M.P. for Thetford (1857-67). Is ambassador to America. The first peer, a well-known merchant, became President of the Board of Trade.

Asher, Mr. Alexander, M.P., was b. 1835. Educated at King's Coll., Aberdeen, and the Univ. of Edinburgh. Called to the Scottish bar (1861). Has held, and holds in the present ministry, the post of Solicitor-General for Scotland. Returned in the Liberal interest as member for Elgin District (1881-84); re-elected 1885.

Ashford, William Coutts Keppel, P.C., K.C.M.G., 3rd Baron (creat. 1696); styled by courtesy Viscount Bury; b. 1832. Was Civil Secretary and Superintendent of Indian Affairs for Canada (1855-59); Treasurer of the Queen's Household (1859-66); Under-Secretary for War (1878-80), reappointed 1885; M.P. for Norwich (1857); unseated on petition; returned for Wick (1860) and for Berwick-on-Tweed (1868); summoned to the House of Peers in his father's Barony of Ashford (1876).

Ashkenazim. See JEWS.

Ashmead-Bartlett, Mr. Ellis, M.P., was b. 1849. Educated at Ch. Ch., Oxford. Civil Lord of the Admiralty (1885). Returned in the Conservative interest as member for Eye (1880-85); Ecclesiastical Division of Sheffield (1885).

Ashton, Mr. Thomas Gair, M.P., was b. 1855. Educated at Rugby and University College, Oxford. Mr. Ashton, who is J.P. for Lancashire, was returned (1885) as member for Cheshire, Hyde Division, in the Liberal interest.

Asia, Central. See CENTRAL ASIA.

"Asiatic Quarterly Review." A review the first number of which appeared January 1st, 1886, devoted to the consideration and discussion of Asiatic questions which are becoming increasingly of interest to the British public. Questions are treated from an Oriental as well as European standpoint. A chronicle of Asiatic events and literature forms a feature of the *Review*. Editor: **Mr. Demetrius Boulger, M.R.A.S.**

Askabad. The administrative centre of the Russian province of Trans-Caspia, situated in the Akhal Tekke oasis, 280 miles by railway east of Michaelovsk, on the Caspian, on the direct road to Sarakhs, Herat, and India. Was occupied by Skobelev in Jan. 1881, immediately after the fall of Geok Tepé. The population consists of a few thousand Turcoman families, and a fluctuating garrison of more than 5,000 troops. A strong fortress overawes the country. From Askabad to Merv the distance is 232 miles, to Sarakhs 185 miles, to Herat 388 miles, to Candahar 757 miles, and to Quetta 902 miles.

Aspinall, Mr. John Bridge, Q.C., grandson of the late Mr. J. B. Aspinall, Mayor of Liverpool in 1813, was educated at Rugby. Called to the bar at the Middle Temple (1841); Recorder of Liverpool (1862-64). Received into the Roman Church at York (1847). The late Recorder was a great criminal lawyer, and held in high esteem. Died February 6th, 1886.

Assab. See ITALY.

Assam. See COOLIE.

Assessed Taxes. The taxes known under this name now comprise the house tax only: other excise duties, in substitution for the assessed taxes which from the time of the great war with France up to 1869 were levied according to a return made by the taxpayer of the maximum establishment (greatest number of carriages, servants, etc.), kept by him at any time in the previous year, are often erroneously termed assessed taxes. The house tax in its present form was first imposed in 1851. It is charged upon every inhabited house in Great Britain. But a house is not charged because a caretaker resides in it. Tenements in a building used only for the purposes of a business or a profession are not charged. Chargeable houses are charged at two rates: a rate of 6d. in the pound upon shops, coffee or public houses, inns and hotels; and a rate of 9d. in the pound on all other houses. Houses of less than £20 annual value are exempt from the tax. The other assessed taxes are really excise license duties. These so-called duties are imposed upon armorial bearings, carriages, male servants, dogs, guns and sporting licenses. The taxes upon carriages and male servants are levied only in Great Britain. Hackney carriages are charged at a lower rate than private carriages. Vehicles used solely for the conveyance of goods in the course of trade or husbandry, and bearing the owner's name and address, are not charged at all. Servants wholly employed by the keeper of any hotel, inn, public-house, or place of refreshment, for the purpose of his business, are exempt from the tax on male servants. Dogs kept solely for the purposes of tending sheep or cattle, the dogs of the blind, all dogs under six, and hound whelps under twelve months of age, are exempt from the dog tax. All these taxes, as well as the house tax, have been placed under the management of the Commissioners of the

Inland Revenue. [See DOWELL, "History of Taxation and Taxes in England," vol. iii., bk. 3; and LAWS OF EXCISE—Bell & Dwyer (Maxwell).]

"Assistance." See ARCTIC EXPLORATION.

Association Internationale du Congo.

See CONGO FREE STATE.

Assyria. See BIBLICAL ARCHÆOLOGY.

Assyriology. The Nineveh discoveries of Mr., now Sir Henry, Layard, were the revelation of an empire the traces of whose existence had practically disappeared; whose buildings, records, and inscriptions were already buried in ruins before the curiosity of the Greek mind had had the opportunity of exercising itself upon them. The sole materials for a history of the ancient civilisation of the Tigro-Euphrates basin were derived either from the Jewish records scattered over the earlier books of the Old Testament, or from the accounts of such historians as Herodotus and Ctesias, who wrote respectively 200 and 250 years after the termination of the Assyrian rule. Such materials were too slight to enable the historian to depict, or even to conceive, the nature of the link between the Eastern and Western forms of thought; and the speculative Greek knew little or nothing of the civilisation in the Tigro-Euphrates valley which had preceded him; but which is fairly described as having given and "carried on to him an Indian philosophy and belief, and exercised unseen to him an influence on the system and philosophy which he subsequently produced." It was so recently as the year 1842 that the first important effort was made to discover the long-hidden relics of a venerable and mysterious past. To M. Botta, the French consul at the modern town of Mosul, on the Tigris, belongs the distinction of having begun explorations in that year in the great mound called Kouyunjik, opposite the town. Although Kouyunjik has since yielded so plentiful a store of antiquities as to have given its name to one of the galleries of the British Museum, the search of M. Botta was unsuccessful, and he shifted the scene of his investigations to a site called Khorsabad, about fourteen miles from Kouyunjik, where his perseverance was rewarded by several important discoveries, which were subsequently carried to France and deposited in the Louvre. Fired with a generous emulation, Mr. Layard, in 1845, commenced similar investigations at the site of Nineveh, which, being renewed in 1849, were subsequently carried on by the trustees of the British Museum. Later researches were conducted, first under the auspices of the *Daily Telegraph*, and afterwards of the Government, by the late Mr. George Smith; and most recently of all by Mr. Rassam, whose most splendid discovery has been that of the bronze ornaments of the palace gates of Balawat, of the time of Shalmaneser II. (B.C. 859-825). The treasures severally acquired by successive explorers comprise not only the massive inscribed man-headed and winged bulls and lions, the discovery of which reflects so much glory on Sir Henry Layard, but sculptures of every kind in metal or stone, rings, gems, weights and cylinders, and tablets of terra cotta—the last numbering scores of thousands, in a more or less perfect condition, some of them being hopelessly fragmentary. These documents are conversant about the cosmogony, the religion, mythology, superstition, charms, magic, medicine, and astronomy, the natural history,

zoology, botany, and metallurgy, the grammar, language, literature, and mathematics, the statistics, temples, palaces, and fortified places, the history, laws, political and diplomatic relations, of ancient Assyria and Babylonia, and upon the social and commercial life—many of the tablets being “contract tablets” recording the sale of land, slaves, and other commodities, and banking transactions—of the people of those countries.—The name of **Sir Henry Rawlinson** stands honourably at the head of the decipherers of the cuneiform inscriptions, the form of whose characters varied considerably according to age, locality, and the hand of the scribe in which it was inscribed. The oldest reached to the earliest ages of the Babylonian and Assyrian monarchies; and the inscriptions of **Khammurabi** date from some unascertained century anterior to the time of Moses, and probably more than a thousand years before the reign of **Nebuchadnezzar**, whilst the cuneiform style of writing had not been entirely discontinued at the commencement of the Roman empire. It was a common custom for the Assyrians to obtain and copy Babylonian works; and a considerable portion of Assyrian literature consists of these copies of older standard writings. **Sir Henry Rawlinson** has been effectively followed in the field of translation as distinguished from decipherment by **Mr. H. Fox Talbot**, **Dr. George Smith**, **Dr. Jules Oppert**, **Dr. Schröder**, **Dr. Hincks**, **Rev. A. H. Sayce**, **Mr. Boscawen**, **Mr. Pinches**, and others; through whose faithful labours it has resulted that for several years past the reproach of the discrepancy and diversity of Assyriological exegesis, at first attaching to what was in some respects a tentative study, has been wiped away. It is at present in the position of a certain science, of which the rules and the instruments are as uniformly and infallibly recognised as those of Hellenic or Latin learning. (Consult **Dr. Birch's** Preface to vol. i. of “Records of the Past”; **Mr. H. Fox Talbot's** Introduction to the Translation of the Inscription of **Khammurabi**, in vol. i. of “Records of the Past”; **Rev. A. H. Sayce**, *passim*, in “Records of the Past”—**Babylonian Literature**, and Lectures upon the Assyrian Language; **Mr. George Smith's** “Chaldean Account of Genesis,” “Chaldean Account of the Deluge,” and “History of Babylonia”; **Dr. E. Richmond Hodgkin's** “Cuneiform Decipherment,” in the third edition of **Cory's** “Ancient Fragments”; **Birch and Pinches's** “Bronze Ornaments of the Palace Gates of Balawat”; **Mr. E. A. Wallis Budge's** “Babylonian Life and History”; **Mr. W. St. Chad Boscawen's** “From under the Dust of Ages,” etc., etc.)

Astronomical Photography. See **ASTRONOMY**.

Astronomical Unit. See **ASTRONOMY**.
Astronomy, 1885. In this science workers increase year by year, while new fields of observation are being continually opened up. The sun naturally absorbs a large proportion of energy. It is admitted that the spots are depressions—at least to this extent, that the umbra is at a lower level than the penumbra; but much has yet to be done in watching the relations of spots to adjacent faculae; indications of cyclonic motion should be looked for; there is also the phase of the spot to be noted in relation to terrestrial magnetic storms; also the question to be answered, Do the faculae cast shadows? **Langley's** researches

on solar heat have yielded some surprising results. He finds the amount of atmospheric absorption 40 per cent., or just double its former received value; also the infra-red rays, as universally supposed, do not suffer most absorption, this fate falling to the visible rays in the green and blue. The true colour of the sun is therefore of a bluish tint. **Dr. Huggins**, who has succeeded in photographing the moon at noon, has also been successful in photographing the solar corona without the aid of an eclipse. The great astronomical unit, the solar parallax, is now known to 0.15", and is probably 8.85"—i.e. the distance of the earth from the sun is 92,440,000 miles. The problematical satellite of Venus is, like **Vulcan**, the intra-Mercurial planet, yet to be discovered. Venus attained its full brightness in January 1886. Our knowledge of Mars is still vague; changes on its surface evidently occur, and we may assume the existence of seas of fluid. No. 883, **Minor Planet**, has been added to our list. The great red spot which has existed for the past seven years is still visible on the surface of Jupiter. Bad atmospheric conditions have much to answer for; but we may accept the sharp and distinct outline, the lessening of the reddish tint, and the obscuration of its central portion by some white stratum. The white spots have been unusually numerous, and are worthy of study. Do they cast shadows? Do they drift towards the equatorial regions? Do they turn black? The ring system of Saturn is still well open for observation; the outer ring is the difficulty,—other divisions besides Bucke's are suspected. The rotation period of Neptune is about 5 h. 29 m. The observation of Meteors now attracts much attention. They are more frequent in the autumn, and greater numbers occur in the morning hours than in the evening, the maximum number appearing about 3 a.m. Meteors are supposed to be the debris of Comets, and the connection of comet and meteor orbits has occupied some of our leading mathematicians. The following are, however, the only cases of certain identity of orbits:—

Comet I., 1861, and Lyrids of April 19-20.

Comet III., 1862, and Perseids of August 9-11.

Comet I., 1866, and Leonids of Nov. 12-14.

Comet III., 1852, and Andromedes of Nov. 27.

The great uncertainty enveloping the fate of **Biela's** comet caused great interest in meteors of November 27th. Biela's comet, if in existence, ought to have passed near the earth at this time, and if not in existence as a comet we were led to expect a rich shower of meteors. The expectation was fulfilled: the display was as rich as in 1872; at the maximum, which was reached about 7.15 p.m., the fall was over sixty per minute. Some were as bright as Venus, many were seen through cloud. The radiant did not appear as a point, but as an elliptical area, which seemed to have a motion towards Cassiopea. By far the most important point in this branch is the discovery, by **Denning**, of long existing radiants, some persisting for months together. The interpretation of this is yet to be found. It suggests the existence of immense streams of meteors with velocities rendering them independent of our sun. The most striking astronomical event of the year has been the appearance of a new star in the great Andromeda Nebula. The public notice of the event was given by **Dr. Hartwig**, August 31st. It has since transpired that

it must have appeared between August 18th and 22nd. At its brightest (August 31st) it was of 6th magnitude. In the middle of December it had dwindled to the 11th magnitude. The spectrum of *Nova Andromeda* was continuous, with perhaps one or two faint lines near D. Opinions differ as to its actual connection with the nebula. *Nova Cygni*, 1876, reached the 3rd magnitude, and showed a similar spectrum. The use of **photography** in astronomy has rapidly increased, owing greatly to the "dry plate." Among the recent advances may be mentioned **Mr. Common's** photograph of the **Orion Nebula**, and the stellar photographs by the **brothers Henry** of Paris. These latter are marvels of skill; stars of the 16th magnitude are quite distinct; the action of the driving clock is perfect,—in an exposure of 120 minutes no deviation can be detected. *Nova Andromeda* has been successfully photographed. The moon and solar corona have been before mentioned. The meridian and wedge photometers as applied to determine the magnitudes of the stars have excited interest. **Professor Pickering**, with the former, brings the star to be observed into the same field of view with **Polaris**, then by turning a Nicol prism until the two images are equal he gets their relative brightness. **Professor Pritchard** obtains his comparisons by determining at what point in a wedge of tinted glass, placed in the focus of his telescope, the light of a star is extinguished. The **spectroscopic** researches at Greenwich, on the **motion of stars** in the line of sight, have revealed some facts concerning **Sirius** which suggest the idea that this star is moving in an elliptic orbit. In the following interesting table the sign + means a recession from our system and — an approach.

1875-77 + 21.1	motion in miles per second.
1877-78 + 23.0	" "
1879-80 + 15.1	" "
1880-81 + 11.3	" "
1881-82 + 2.1	" "
1882-83 — 4.7	" "
1883-84 — 19.4	" "
1884-85 — 21.5	" "

Much has been done in ascertaining the "**parallax**" of **fixed stars**. There are twenty having a parallax of over 0.1"; and **Centauri**, the nearest to our system, has a parallax of 0.75", corresponding to a distance of 275,020 times the radius of the earth's orbit. **Sirius**, the brightest star, has a parallax of only 0.15" corresponding to a distance of 1,375,000 times the radius of the earth's orbit.

Asylums Board (Metropolis). The Metropolitan Poor Act, 1867, provides for the establishment of asylums for the reception of the sick, insane, infirm or other classes of the poor chargeable in the metropolitan unions and parishes. To this end it empowers the Poor Law Board (since absorbed in the Local Government Board) to combine any of these unions and parishes into such districts as it may think proper, and places a district when formed under a body of managers to be partly elected by the guardians of each of the several unions or parishes included in the district, and partly nominated by the Poor Law Board (Local Government Board). The persons elected were to be either guardians or ratepayers qualified to serve as guardians. The nominated managers were not to exceed one-third of the elected managers, and were to

be chosen from among justices of the peace resident in the district or ratepayers resident in the district and assessed to the poor-rate at not less than £40 per annum. Pursuant to this Act the Poor Law Board, by an Order of the 15th May, 1867, created the Metropolitan Asylum District, comprising the following Unions:—City of London, Fulham, Greenwich, Hackney, Holborn, Lewisham, Poplar, St. George's, St. Olave's, St. Saviour's, Stepney, Strand, Wandsworth and Clapham, Westminster, Whitechapel, Woolwich; and the following parishes: Mile End Old Town, Paddington, St. George's in the East; St. Giles Cumberwell, St. Giles in the Fields, and St. George Bloomsbury, St. John Hampstead, St. Leonard Shoreditch, St. Luke Chelsea, St. Mary Abbots Kensington, St. Mary Islington, St. Mary Lambeth, St. Marylebone, St. Matthew Bethnal Green, St. Pancras. The Board has provided asylums at Leavensden and Caterham for the insane, and at Homerton and Stockwell for sufferers from infectious diseases.

"Athenaeum." The leading English literary journal (weekly 3d.), founded 1828. Amongst its editors are included the names of Rev. H. Stebbing, Mr. Dilke, and Mr. Hepworth Dixon (who retired in 1869). Shortly after its origin, it was acquired from its founder, Mr. Silk Buckingham, by Mr. John Sterling, and subsequently passed into the hands of Sir Charles W. Dilke, to whose ability its success was mainly due.

Atherley-Jones, Mr. Llewellyn Archer, M.P., the son of the late Mr. Ernest Jones, the Chartist, was educated at Brasenose Coll., Oxford. He was called to the bar (1875). Returned in the Liberal interest as member for North-West Durham (1885).

Athylnney, James Herbert Gustavus Meredyth Somerville, 2nd Baron (creat. 1863); Baron Meredyth (1866), by which title he sits in the House of Lords; b. 1865; succeeded his father 1873. The 1st Baron, well known as Sir William Somerville, was Chief Secretary for Ireland.

Murray, John James Hugh Henry Stuart Murray, K.T., 7th Duke of (creat. 1703), was b. 1840. Sits as Earl Strange. Hereditary Sheriff of Perthshire. Holds the Barony of Percy. Second title, Marquis of Tullibardine.

"Atlas." See **NOMS DE PLUME**.

Atomic Weight. See **ATOMS** and **CHEMISTRY**.

Atoms and Molecules. The following are the present views of most chemists as to the constitution of matter. Any kind of matter consists of small particles, called **molecules**, which are not capable of further subdivision. When these are of different kinds, the sample of matter yielding them is a **mixture**. A molecule is the smallest portion of matter which can exist by itself, or which can be produced by (or take part in) any chemical reaction. Nothing definite is known about the sizes or the masses of molecules, although attempts have been made to measure them. But it is assumed that equal volumes of any two gases under the same conditions of temperature and pressure contain equal numbers of molecules (**Ampere's law**). Many facts of a more or less technical nature point to the conclusion that molecules consist of atoms. An atom is the smallest portion of matter which can exist in a molecule. Some molecules (e.g., of mercury, zinc) consist of only one atom; others (e.g., of hydrogen, sodium, muriatic acid gas) of two; others (e.g.,

water, laughing gas) of three; others (*e.g.*, phosphorus, ammonia) of four; and so on. When these atoms are of different kinds, the molecule containing them is a **compound**; when they are of the same kind, it is an **element**. Sometimes a group of atoms united together acts like an atom; such groups are called **compound radicals**. The **atomic weight** of an element is the number of times by which an atom of that element is heavier than an atom of hydrogen. The **molecular weight** of a body is the number of times by which its molecule is heavier than a molecule of hydrogen. It is wrong to say "the atom of hydrogen weighs 1"; we do not know its weight (*i.e.* mass). Its atomic weight is 1 (*i.e.* is the unit); and its molecular weight is 2. Atoms possess **chemical energy**, which becomes converted into other forms of energy when they unite to form molecules; and other forms of energy must be employed to bring about a decomposition of these molecules; thus, when hydrogen combines with oxygen to form water, one molecule (two at.ms) of oxygen and two molecules (each containing two atoms) of hydrogen are decomposed into their constituent atoms; and each atom of oxygen unites with two atoms of hydrogen, forming in all two molecules of water. This is expressed by the **chemical equation** $2H^+ + O = 2H_2O$. The evolution of heat observed (**heat of combustion**) is due to the fact that the chemical energy with which two molecules of water are formed is more than sufficient to supply the energy required to decompose two molecules of hydrogen and one of oxygen; the excess is converted into the energies of heat, light, and sound. An element is often far more active in entering into combination at the moment of its formation than when it has been produced; this is called its **nascent state**. It is probable that this is due to the atoms not having combined with each other into molecules.

Attorney-General, The, is the chief counsel of the Crown, acting on its behalf in its revenue and criminal proceedings, and granting patents. The income is £7,000 a year, exclusive of fees. The Attorney-General has likewise political functions, and has always since 1673 been a member of parliament, receiving his office from the Sovereign on the recommendation of the Government in power. All Government measures on legal questions are in his charge. The Prince of Wales also appoints an attorney-general, who is, however, generally called the Attorney-General for the Duchy of Lancaster, or for the Duchy of Cornwall, according to his appointment. The present Attorney-General is Sir C. Russell, Q.C.

"Auber Forrester." See NOMS DE PLUME.
Auckland, William George Eden, 4th Baron (creat. 1793); b. 1829; succeeded his father 1870. The 1st Baron was Irish Secretary and ambassador to France; the 2nd Baron, Governor-General of India.

"Angustsohn." See NOMS DE PLUME.

"Aunt Judy." See NOMS DE PLUME.

"Aunt Kitty." See NOMS DE PLUME.

"Aunt Louisa." See NOMS DE PLUME.

Aurora Borealis, *The*, or the Northern Light, a ruddy glow that at times overspreads the northern horizon, is supposed to be due to the passage of electricity through the rarefied atmosphere of the polar regions. It was last observed in England in October 1870.

Australasia. A loose term variously applied. It usually includes the Australian continent,

New Zealand, Tasmania, Fiji, New Guinea, etc.—*q.v.* (Consult Wallace's "Austrasia.")

Australasian Federation. During the session of 1885 the Gladstone cabinet introduced, and the Salisbury administration took up, a measure which subsequently received the royal assent, and which enabled the whole of the South Pacific colonies to federate. So far all of these colonies except New Zealand, South Australia, and New South Wales have taken advantage of the Act, and the Federal Council thus constituted met at the end of January 1886. The new body possesses absolute legislative authority in respect to such general questions as the influx of criminals, regulation of the fisheries in Australasian waters beyond colonial limits, the service of civil and criminal processes beyond the limits of the colony in which they are issued, and the enforcement of judgments of courts of law. The rights of individual colonies being effectually secured, a conditional power is given to deal with such subjects as colonial defence, quarantine, patents, copyright, both of exchange and promissory notes, weights and measures, recognition of marriage and divorce, naturalisation of aliens, and the status of joint stock companies in other colonies than those in which they have been constituted. At the formal opening of the Council the Hon. James Service was elected President, and at a subsequent meeting a telegram was sent to the Queen expressing the loyalty and devotion of the Council to Her Majesty's throne and person. The measures passed included bills authorising the service of civil process outside the jurisdiction of the colony issuing it, and providing for the enforcement of judgments of the Supreme Courts within the Federation.

Australia. The largest island in the world. Is situated south-east of Asia, dividing Pacific from Indian Ocean. Extends 2,400 miles west to east, and 1,971 miles north to south. Area computed at 3,000,000 sq. miles, or twenty-six times the size of Great Britain and Ireland. Wholly British possession. Divided into the colonies of Queensland, New South Wales, Victoria, South Australia (including Northern Territory), and Western Australia (*q.v.*) Known to the Portuguese prior to 1540; later visited by Dutch navigators, and then called New Holland. Visited by Cook, and first British settlement (originally penal) formed at **Botany Bay** in 1788. Present total population estimated at nearly three millions (latest returns.) Australia is a great plateau, elevated on the east and inclined towards the west. The eastern part and most of the territories bordering the coasts are extremely fertile, and well adapted for grazing. Wool still continues to be the staple export. The great central depression is sterile, and almost impassable on account of want of water together with prickly growths; having no drainage, the rainfall collects in extensive salt lakes and marshes. In the habitable districts there is a rich and unique flora and fauna. Coal abounds; gold, silver, iron, copper, tin, zinc, graphite, etc., are also worked. Climates vary from tropical to temperate. Rainfall capricious: in some years excessive, in others prolonged drought. Principal rivers, the Murray and its affluents, navigable many hundred miles in wet seasons. There are 4,851 miles of railroad, and 46,351 miles of telegraph, several large cities, and many towns. The black aborigines are few, and rapidly disappearing. Total public re-

venue about £23,000,000; exports, £48,000,000; imports, £45,000,000. (See Blair's "Cyclopædia of Australia," Forrest's "Explorations in Australia," Giles' "Geographic Travels in Australia," Gordon and Gotch's "Australian Handbook for 1886," etc.)

Australia Felix. See VICTORIA.

Australia, South. See SOUTH AUSTRALIA

Australia, West. See WESTERN AUSTRALIA.

Australian Meat. See MEAT SUPPLY.

Austria. See AUSTRO-HUNGARY.

Austrian Political Parties and Reichsrath. The "Reichsrath," or council of the Empire, is the central legislative body of Austria, or "Cisleithania." It consists of an **Upper House (Herrenhaus)** and a **Lower House (Abgeordnetenhaus)**. The Reichsrath, like the legislative body of Hungary or "Transleithania," has its own ministers and government, and exercises full parliamentary functions on all matters within its competence, from which, however, **Foreign Affairs and War** are excluded. These latter questions are dealt with by a supreme body known as the **Delegations**, composed of 60 members representing the legislative body of Austria, the upper house returning 20 and the lower house 40 delegates, and of an equal number, similarly chosen, representing the legislative body of Hungary. The present **Upper House** of the Austrian Reichsrath contains 205 members. It is composed of the Princes of the Imperial family who are of age, of whom there are 18; of certain "**Erbliche Mitglieder**," or hereditary members, upon whose families the privilege has been conferred, and who in the present parliament are 65 in number; of the archbishops, who rank as Princes of the Church, and number 17; and of 105 life members nominated by the Emperor for distinguished services in science or art, or to the Church or State. The **Lower House** contains 353 members, who are the popular representatives of the seventeen provinces which comprise the Austrian Empire. Bohemia has the largest number of members in the Reichsrath, its contribution being 92; Galicia comes next, with 63; and then follow in order, **Lower Austria** (including Vienna), 37; **Moravia**, 36; **Styria**, 23; the **Tyrol**, 18; **Upper Austria**, 17; **Silesia** and **Carniola**, 10 each; **Bukowina**, **Dalmatia**, and **Carinthia**, 9 each; **Salzburg**, 5; **Triest**, **Gorizia**, and **Istria**, 4 each; and finally the **Vorarlberg** with 3. Each of these provincial divisions, however, has its own **separate Diet**, but which consist of one chamber only, for dealing with purely local matters. The conflict of parties may be said to attain its highest pitch in the lower house of the Reichsrath, which naturally includes members of widely varying race and creed. The most numerous element in the Cisleithan Chamber is the **German**, which numbers about 200, but is still unable to command a majority, owing to the dissensions within it. Comprised, indeed, in this one powerful national element, are four distinct parties—viz., the so-called **German Austrian Party**, the **German Party**, the **German Clerical Party**, and the **Centre Party**. The remaining national groups are the **Czechs** (led by Dr. Rieger), who muster 65, the **Poles** (led by Dr. Grocholski) with 55, the **Slavonians** and **Italians** with 10 each, the **Croatians** with 9, and the **Ruthenians** with 6. **Legislation** is therefore only possible by means of combinations; and this is the invariable mode of obtaining a

majority, the combination changing at times, although it usually has as its basis the **Czechs** and **Poles** and minor nationalities. Such has been the condition of things since 1879, when the united German party, which professes moderate Liberal principles, was broken up through the opposition to the occupation of **Bosnia** and **Herzegovina**. The leader of the present **German Austrian party**, of 86, is **Dr. Herbst**, an ex-Minister of Justice and a pre-eminent orator. Allied to this group is the **German party**, consisting of 44 members, and led by **Dr. Heilsberg**. A political difference has recently arisen between the two parties, however, on the subject of the action of Prince Bismarck in expelling the Poles from Prussia—the German party approving it and the followers of Dr. Herbst opposing it. These two groups are occasionally supported by a fraction of the Centre party, led by **Count Coronini**, and known as the **Coronini party** (10); but even if all three portions steadily combined, they would still fall short of an absolute majority. The **German Clerical party** which is headed by **Count Hohenwart** (with 38 followers), and **Prince Liechtenstein** (with a following of 20), is clerical first and German afterwards. It is therefore invariably to be found in opposition to the German Liberals, and unites with the 65 Czechs, the 55 Poles, and the remaining minor factions, which are always found in opposition to the purely German element. Another small group that generally votes with the majority is the **Trento party** of 7 members, led by **Dr. Bertolini**, all of whose members sit for the Tyrol. There are also 28 "**Wilde**," or **Savages**, who belong to no party, and include 4 **anti-Semitic** deputies.

Austro-Hungary is an empire under the rule of Francis Joseph I. of Hapsburg, Emperor of Austria and King of Hungary, and is composed of a Cisleithan portion, officially known as Austria, and a Transleithan portion known as Hungary, each possessing its separate parliament, but uniting under a common sovereign in the establishment of a common army, navy, financial diplomatic, postal and telegraphic services, administered by delegations composed of 120 deputies chosen half by Austria and half by Hungary—the upper house in each country selecting 2 and the lower 40 members. The expenditure under the control of the delegations in 188 amounted to about £12,830,000, five-eighths of this total being borne by Austria, the remainder by Hungary. The army in peace is about 272,400 and in war can be raised to 1,039,500. The navy is composed of 14 iron-clad and 53 other vessels. **Austria** (capital Vienna, area 115,903 square miles, population 22,150,000) is governed by a Emperor and a Reichsrath or federal parliament, consisting of a house of peers partly hereditary and partly nominated by the Crown for life, and a house of deputies chosen by popular election. Purely local matters are administered by the seventeen provincial diets (viz., of Upper and Lower Austria, Salzburg, Styria, Carinthia, Carniola, Tyrol, Vorarlberg, Gorizia, Istria, Trieste, Dalmatia, Bohemia, Moravia, Silesia, Galicia and Bukowina). The revenue in 1884 was £47,456,000, the expenditure £51,493,000, and the national debt about £38,000,000.—**Hungary** (capital Budapest, area 125,039 sq. miles, pop. 15,650,000) consists of the kingdoms of Hungary, Croatia, Slavonia, and Transylvania, and is governed by a King, (the Emperor of Austria) and a parli-

ment composed of an upper and hereditary house and a lower and elective house. The revenue in 1884 was about £32,631,000, the expenditure £33,799,000, and the national debt £127,335,000.—**Bosnia**, with a population about 1,250,000, though in strictness still a province of the Porte, has since the Treaty of Berlin in 1878 been occupied and administered by Austro-Hungary, and may fairly be considered as belonging to that empire. Since the reconciliation of the Magyars with the House of Hapsburg, in 1867, great progress has been made in reconciling the various races in different stages of civilisation which inhabit this heterogeneous empire (so much so that it is by no means unlikely that Austro-Hungary may be the political heir to a considerable part of the European dominion of the Ottoman Empire, and the possible head of a South Slavonic confederation). In 1870 the publication of the doctrine of Papal infallibility caused the Austro-Hungarian Government to suspend the existing concordat, and the effect of the change was at once shown in the increased cordiality between the empire and Italy. During the Franco-German war a strict neutrality was observed. For several years great difficulty was experienced in securing a fair representation of the different classes and races (the Bohemian diet having for several years refused to send up representatives); but in 1873 a law was passed which transferred the election of members of the Reichsrath from the provincial diets to the general body of electors in the several provinces, and established the government upon a broad and secure basis. The first session of the new parliament was opened by the Emperor on November 5th, 1873. On May 1st, 1873, an international exhibition was opened at Vienna, and was visited by the Prince of Wales, the Tsar, the Kaiser of Germany, the King of Italy, and the Shah of Persia. In December 1873 the twenty-fifth anniversary of the accession of Francis Joseph was celebrated at Vienna and Buda-Pesth with great enthusiasm. In 1874 a bill for the abolition of the concordat was passed. In 1871 Count Andrássy succeeded Count Beust as foreign minister to the Empire. With respect to Hungary, in 1872 much financial difficulty occurred, owing to the pressure of heavy loans contracted to meet the large expenditure upon State railways and public works. In August the military frontier districts were broken up and placed under civil jurisdiction. The Deak cabinet, which came into office in 1869, and was re-elected in 1874, resigned on a question of finance in favour of a coalition ministry, which resigned in February 1875, the houses refusing to grant additional taxation. A Liberal ministry under Tisza (which has lasted to the present time) secured a large majority at the elections of 1875, the financial difficulty being met by an increase in direct taxation and by a loan. On January 20th, 1876, the great constitutional reformer Deak died. In the following March the Saxon communities in Transylvania and many royal free towns lost their special privileges, and were placed under the ordinary local jurisdictions. During the year the disturbed state of the Slavonic population in European Turkey excited much apprehension lest the Slavs of Croatia and South Hungary should make common cause with their brethren; and so great sympathy with the Porte was displayed by the Magyars—a sympathy not diminished by the cordiality evinced by the Sultan Abdul Hamid by his gift in 1877 to the

university of Buda of the remains of the Library of Matthias Corvinus, which had been captured by the Turks and taken to Constantinople—that it was a matter of much difficulty to restrain them from armed interference on the Ottoman side. For the same reason much popular excitement was aroused in 1878 by the great loss in men and money consequent on the occupation of Bosnia under the Berlin Treaty, followed a few months later by the occupation of the district of Novi Bazar, a step of of no little importance, in that it prevented the union of the Slavs of Servia with those of Montenegro. The excitement arising from this incident, however, died away, and the elections of October 1878 gave increased strength to the existing Liberal ministry. In the spring of 1879 the destruction of Szegedin by floods, followed, in December, by the disastrous inundations of Grosswardein, Arad, and other towns and districts in the valleys of the Theiss, Maros, etc., forced upon the State the urgent necessity of improvement in the system of river embankments, etc. A loan of 40,000,000 florins was raised for rebuilding the towns and regulating the courses of the rivers in question. In October 1879 Andrássy resigned, and Baron Haymerle succeeded him as foreign minister. In 1880 a ministry under Count Taaffe, chiefly chosen from among the so-called "autonomist" party, was formed, further steps were taken to remove the differences between the Germans and Slavonic subjects, and a progress through the Slavonian provinces was undertaken for this purpose by the Emperor with good results. Negotiations for the establishment of a mixed commission of the riparian states, for the superintendence of the police and navigation of the Danube, and also for the conclusion of a commercial treaty with Servia, were entered into. The Irredentist agitation for the union of the Italian Tyrol and Trieste with Italy did not interrupt the friendly feeling existing between Austria and Italy. In 1881 further changes in the Taaffe ministry in favour of the autonomist party took place. Severe quarrels in the house and riots abroad between the Germans and Czechs occurred. In July the Emperor made a very successful progress through Tyrol, etc. In September local risings against service in the army took place in Cattaro, Bosnia, and Herzegovina. In October, Baron Haymerle, the Foreign Minister of the empire, died, and was succeeded by Count Kalnoky, who continued the peaceful and cautious policy of his predecessor. The Emperors William and Francis Joseph met at Gastein in August, and confirmed the existing alliance. The visit of King Humbert to Vienna in October was important in demonstrating that the Irredentist agitation was powerless to interrupt the harmony between Italy and Austria. In February 1882 a rising in Dalmatia and Herzegovina was suppressed; the continued unpopularity of the occupation of Bosnia, etc., was shown by the refusal of the Hungarian chamber to sanction a portion of the expenditure incurred in suppressing this revolt. A bill for allowing the teaching at the University of Prague to be conducted both in the German and the Czech language was passed. In May, and later, Jewish riots broke out in Presburg and Vienna, in consequence of a report of the sacrifice of a Christian servant-girl at the Passover by Jews near Tokay—the real cause of their unpopularity being their supposed complicity with the tax-gatherers. A lengthy trial

resulted in their complete acquittal. The delegations determined on the reorganisation of the army upon the territorial system—the effect being to extend the power of the non-German nationalities. Some coolness was produced by insults offered to Austrian ambassador at Rome in December, in consequence of the Irredentist agitation, but in the following year the irritation was shown to be, but temporary by the alliance arranged between Austria and Italy. The Danube question still unsettled, but the scheme of the French Commissioner was adopted by all but the Roumanian delegate for submission to signatories of the Berlin Treaty. In 1883 the conciliation policy of the Taaffe ministry continued, much to the discontent of Germans at the diminution of their influence. In Hungary the control of the German schools in Transylvania was transferred also to Magyar officials; but a proposal to prohibit the German language (and therefore German civilisation) in the schools was rejected. In August the escutcheons with Hungarian and Croat mottoes over the public offices in Agram were torn down—the use of Hungarian for such a purpose being regarded as an insult to the Croatian nationality. The matter ended in a compromise by which the shields without any inscription were restored. A bill allowing marriage between Jew and Christian was defeated in the Hungarian Chamber in December. A quarrel with Roumania was composed on the visit of the King and Prime Minister to Vienna in the autumn. In February 1884 a socialist conspiracy was discovered, a state of siege proclaimed in Vienna, forty anarchists expelled, and a socialist murderer of a policeman was executed. In June twenty-three anarchists were brought to trial and convicted. The bill for authorising Jewish and Christian marriages was again rejected. New elections to Hungarian parliament took place in June. In May Kossuth, in answer to an address on his 80th birthday, published a manifesto of loyalty to the dynasty and adherence to the law. In July the conduct of the Croatian radical party became so outrageous that it was necessary to introduce temporarily martial law. An alliance with Russia also concluded. The elections in May 1885 reaffirmed Count Taaffe's majority in the Reichsrath, and justified his policy in seeking to preserve an exact equilibrium between the various races—his opponents, the German party, losing twenty seats. There was a deficit on the extraordinary budget, which was paid out of the balances, and it was hoped that the accounts for 1885-6 would show a surplus; but the necessity of mobilising the forces in Bosnia (where great material progress has occurred in the last few years—a railway having been opened to Serajevo, the capital, and roads all over the district), caused (Jan. 14th, 1886) a deficit of about £1,000,000, proposed to be met by retrenchment and suspending the construction of new State lines. Feb. 28th, the twenty-fifth anniversary of the establishment of constitutionalism in Austria, celebrated by the Liberal party. Herr Scharschmid's bill for making German the State language of Austria, voted (March 12th) by a majority of 209 to 68. Baron Pino, Minister of Commerce, suddenly resigned in consequence of a circular conferring excessive powers on the directors of savings banks being cancelled (March 15th). Negotiations between the Austrian Government and Roumania for pro-

visional extension of the Treaty of Commerce, which the Roumanian Government is not (March 27th) at present disposed to renew. Croatian Commission appointed to formulate Croatia's grievance against Hungary recommended (March 18th) that all official documents and public inscriptions, etc., be in the Croatian language.

Authors. See INCORPORATED SOCIETY.

Authors and Publishers. In arrangements for publishing the principal thing to be considered is the *original contract* between the two contracting parties. It frequently happens that misunderstandings take place through no definite agreement having been entered into between the two parties—which means that certain contingencies may arise (especially in case of the failure of a book) which have to be settled somehow, when perhaps free negotiation on either the one hand or the other is handicapped. Both parties should therefore see that before a book is sent to press a comprehensive and definite agreement, covering all points likely to arise, is entered into. **Agreements** take many forms. The most simple for working—and therefore the most desirable—are the three following. 1 and 2. Whereby either the publisher or the author takes the whole risk of publication upon himself, paying to the other an equivalent for his work, are usual where an author is a recognised writer. They are effected by—(1) the publisher buying the author's MS. from him, and paying to him either (a) a percentage sum for all rights in the MS., (b) a royalty upon the sales he makes of the book, (c) a sum for a certain number of years' lease of the copyright; (2) the publisher producing the book for the author, charging him (a) an agreed percentage (usually 5 per cent.) on his cost, and (b) a commission (usually 10 per cent.) upon his sales. 3. In cases where an author is unknown as a writer, and considerable risk is therefore run, it is usual for a combination of 1 and 2 to be arranged, whereby (a) the author and the publisher share the risks in an agreed ratio; and, (b) they divide the proceeds—usually in the ratio of their respective risks. If any of these bases be established between author and publisher, with proper provision for the cases of the book not selling, the sale of large quantities at reduced prices to special buyers (if desirable), the negotiation of American, Colonial and foreign editions and copyrights (where they exist), and similar questions—and granted *bonâ fide*—we believe that no friction need ever arise between two parties to an undertaking which involves identical interests.

Aveland, Gilbert Henry Heathcote Drummond Willoughby, 2nd Baron (creat. 1856). b. 1830; succeeded his father 1867. Holds the appointment of Lord Great Chamberlain, as deputy to his mother, the Baroness Willoughby d'Eresby: is heir to that title; was M.P. for Boston (1852-56), and for Rutlandshire (1856-67).

Aylesford, Charles Wightwick Finch, 8th Earl of (creat. 1714); son of the 6th Earl; b. 1851 and succeeded his brother 1885. See PRIVY LEGES, COMMITTEE OF.

Aylesford, Hemeage Finch, 7th Earl of d. Jan. 1885, at the Big Springs cattle rancho Texas, was b. 1849, and succeeded to the family honours in Jan. 1871. Mar. (Jan. 1871) Edith third daughter of the late Colonel Thomas Peen Williams, of Temple House, Berkshire. He accompanied the Prince of Wales to India.

B

"B." See NOMS DE PLUME.

"Bab." See NOMS DE PLUME.

Babylon, Capture of. See BIBLICAL ARCHÆOLOGY.

Babylonia. See BIBLICAL ARCHÆOLOGY.

Babylonian Works. See ASSYRIOLOGY.

Baccaroons. See COOLIE.

Bachelors' Ball, The, was held on July 22nd, 1880, by eighty-four bachelors, at Kensington House (built by Baron Albert Grant, who, however, never inhabited it), and all the *élite* of London, including the Prince and Princess of Wales, were present.

Bacilli. Rod-shaped micro-organisms, consisting of single cells, the length of which (from $\frac{1}{2}$ to 20 micromillimetres) is more than twice the breadth, composed of a granular protoplasmic body surrounded by a wall which has a clear, sharp outline, and is able to resist the action of most reagents. They multiply in two ways: by simple transverse fission; and by the formation of spores, which, under favourable conditions, reproduce the bacillus form. Their most important bearing is their association with various diseases, such as tubercle, leprosy, woolsorters' disease, etc. For their complete microscopic demonstration special methods of staining are required, and the use of oil-immersion objectives in conjunction with a powerful condenser, such as Abbé's. The following are some of the most important bacilli at present known:—(1) **B. Anthracis**, found in the so-called splenic fever of the lower animals, from which it may be conveyed to man, in whom it is found both in the blood and tissues in charbon, malignant pustule, woolsorters' disease, and Siberian plague. These different forms of one disease are most commonly found in persons who work with skins, hides, wool, etc., which have come from the bodies of animals that have died from splenic fever.—(2) **B. Tuberculosis**, found in the breath, sputum, and tissues of those afflicted with "consumption" (tubercular phthisis) or tuberculosis.—(3) **B. Leprosi**, found in the nodules of leprosy.—(4) **B. Malariae**, found in the Pontine marshes and in certain swamps in America, and in the blood in ague. It is supposed to be the cause of malaria.—(5) **B. Septicæmiæ**, found in the blood of mice in which septicæmia has been artificially produced.—(6) **The B. of Cholera**, or the so-called "*comma bacillus*," discovered by Koch (see CHOLERA), is found in the intestines of people suffering from cholera, and is being at present actively investigated on account of its probable etiological connection with this disease. There is one very similar in shape found in the mouth, but this reacts differently during cultivation. One is found also in the so-called "chicken cholera," an infectious disease to which poultry are liable. There are also the following bacilli of which much less is known: the **B. of typhoid fever**; the **B. of erysipelas** (experimentally produced in rabbits); the **B. of purpura hemorrhagica**; the **B. of syphilis**; and the **B. alvei**, which is the cause of a disease among bees known as "foul brood." There are two forms (**B. subtilis** and **B. ulna**) which are not found in living animal tissues; and there is one (**B. butyricus**) which is the cause of the butyric acid fermentation. There are two forms found in milk, one of which causes the blue colour seen in souring milk

and there are two forms (the *violet B.* and the *fluorescing B.*) which cause special colours to appear round about them.

Bacon. See MEAT SUPPLY.

Bacteria, so named from their resemblance to a rod, are micro-organisms belonging to the lowest known forms of life. They are short cylindrical cells, freely movable, from about $\frac{1}{2}$ to 5 micromillimetres in length, and from $\frac{1}{10}$ to 2 micromillimetres in breadth. There is also an intermediate stage in which large numbers of the organisms are aggregated together in a very delicate jelly-like mass (zooglea form). Bacteria are found in all putrefying matter in enormous numbers, and in many fermenting liquids. Pasteur has shown that they are not only present in fermentation and putrefaction, but that they are really the initiators of these processes. Bacteria are also uniformly present in certain diseases, local and general; and in the opinion of many now they are held to have the same causal relations to these diseases as they have to fermentations and putrefactions. (See GERM THEORY OF DISEASE.) The following are some of the varieties of bacteria:—1. **B. Termo.** These are essentially the bacteria of putrefaction, and in the zooglea form produce the iridescent scum on decomposing fluids.—2. **B. Lincola** is larger than the above, but like it is found in putrefying animal matter, and is one of the organisms found associated with putrescent odours.—3. **B. Xanthinum** is found in boiled milk, and produces a delicate yellow colour therein.—4. **B. Lactis** is found in milk, in which it produces the taste and smell of sour milk. Here may be mentioned one of the tribe of *Spirobacteria*, the *Spirochaeta* or *Spirillum Obermeiri* discovered by Obermeier in the blood of patients suffering from relapsing fever. It is a spiral filament about 50 micromillimetres in length, and is regarded as the cause of this disease.

Baden-Powell, Mr. George Smyth, M.P., son of the late Prof. Baden-Powell, of Langton, Kent. Educated at Marlborough and Balliol College, Oxford, obtaining the Chancellor's English Essay prize (1876); C.M.G. (1884). Returned in the Conservative interest as member for Liverpool, Kirkdale Division (1885).

Baggallay, Mr. Ernest, M.P., son of Lord Justice Baggallay, was b. 1850. Educated at Marlborough, and Caius Coll., Cambridge. Called to the bar at the Inner Temple (1873). 1s Junior Counsel to the Post Office, at the Old Bailey. Returned in the Conservative interest as member for Brixton (1885).

Baghirini. See SOUDAN.

Bagida. See TOGO-LAND.

Bagot, William, 3rd Baron (creat. 1780); b. 1811, and succeeded his father 1856. M.P. for Denbighshire (1835-52). Was for some time Lord of the Bed-chamber to the Prince Consort.

Bailey, Mr. Laurence Richardson, M.P., of Allerton Hall, near Liverpool. Educated in London and Paris. Is J.P. for Liverpool, a director of the Great Northern Railway Co., and chairman of the Reliance Marine Insurance Co. Returned in the Conservative interest as member for Exchange Division, Liverpool (1885).

Bally, Mr. Henry. See BOOK TRADE.

Bains, Prof. See SPELLING REFORM.

Baird, Mr. John, M.P., was b. 1852.

Educated at Harrow and Oxford Univ. Returned in the Conservative interest as member for North-West Lanarkshire (1885).

Baker, Mr. B., C.E. See **ENGINEERING.**

Baker, Mr. Lawrence J., M.P., is the eldest son of Mr. John Law Baker, of Eastcote Lodge, Middlesex. Is now one of the trustees of the London Stock Exchange. Returned in the Liberal interest as member for Frome Division Somersetshire, (1885).

Bakers, The Worshipful Company of. See **CITY GUILDS, THE.**

Bakownine. See **ANARCHISM.**

Balaam's Blessing. See **REVISED BIBLE, THE.**

Balawat. See **ASSYRIOLOGY.**

Balfour of Burleigh, Alexander Hugh Bruce, 6th Baron (creat. 1607); b. 1849. Elected a representative peer for Scotland (Dec. 1876). This title was attained in 1715, but restored (1869) in the person of the present holder, who established his claim as lineal descendant of Mary, and dau. of Robert 4th Lord Balfour.

Balfour, The Rt. Hon. Arthur J., P.C., M.P., eldest son of the late Mr. James Maitland Balfour, of Whittinghame, by his marriage with Lady Blanche Mary Harriett Cecil, sister of the present Marquis of Salisbury, was b. 1848. Educated at Eton and Trin. Coll., Cambridge. Private secretary to Lord Salisbury (1878-80), when Foreign Minister, and was present at the Berlin Congress; President of the Local Government Board (1885-6). He is Deputy Lieutenant for Haddingtonshire. Returned in the Conservative interest as member for Hertford (1874-85); East Manchester (1885).

Balfour, Sir George, M.P., K.C.B., Royal Madras Artillery, was b. 1809. Educated at the Military Academy, Addiscombe. Member of the Military Finance Commission of India (1859-60). Formerly assistant to the Controller-in-Chief, War Dept. Returned in the Liberal interest as member for Kincardineshire (1872-85); re-elected 1885.

Balfour, Mr. Gerald William, M.P., son of Mr. James Maitland Balfour, of Whittinghame, Haddingtonshire, by Lady Blanche Cecil, dau. of the 2nd Marquis of Salisbury; was b. 1853. Educated at Eton and Trinity Coll., Cambridge, where he graduated first class in the Classical Tripos (1874). Was private secretary to his brother, the late President of the Local Government Board. Returned in the Conservative interest as member for Central Leeds (1885).

Balfour, The Right Hon. John Blair, Q.C., M.P., P.C., LL.D., was b. 1837. Educated at the Univ. of Edinburgh. Called to the Scottish bar (1861); Q.C. (1880); Solicitor-General for Scotland (1880); Lord Advocate for Scotland (1881); re-appointed 1886. Returned in the Liberal interest as member for Clackmannan and Kinross (1880-85); re-elected 1885.

Balinghard, Baron. See **SOUTHEK.**

Balkan Free States. These States include Bulgaria, Eastern Roumelia, Roumania, and Servia (*q.v.*) They have all arisen through the decay of the Ottoman empire, and may with much propriety be included under one head.

Balkh. The Ameer of Afghanistan controls a large territory north of the Hindoo Koosh, called Afghan Turkestan, the capital of which is Balkh. If the Russians march upon India from Turkestan *via* Cabul, they must first take Balkh, or *Mazar-i-Sherif*, as the Afghans call the town they have erected near the site of

that ancient city. Hence Balkh is a sort of key to Cabul, although more as a basis of close intrigue than in a military sense, as the passes of the Hindoo Koosh, closed by snow six months of the year, afford a protection lacking in the case of Herat. The Ameer maintains a strong garrison at Balkh, and from it despatches the troops that garrison the rest of the territory between the Hindoo Koosh and river Oxus. In this manner the seizure of Balkh would mean the downfall of the Ameer's rule in Afghan Turkestan and the loss of one-sixth the population of Afghanistan.

Ballad Concerts (Mr. J. 'Boosey's) were inaugurated in 1866 at the St. James's Hall, and have since been very popular.

Ballarat Riots. See **VICTORIA.**

Ballooning. The art of aerial navigation, or rather of researches into its principles, is said to date from the fourteenth century. The first ascent recorded was by the brothers **Montgolfier** by means of a fire balloon, at Aunonay, in 1783; and **M. Robert** and **Charles** were the first to use a hydrogen balloon for a similar purpose at Paris in the following month. In the United Kingdom the pioneer ascensionist was a Mr. Tytler, at Edinburgh, in 1784, when a Montgolfier machine was utilised. Madame Thiblé was the first female aeronaut, ascending in the same year, 1784, with M. Fleurant. In England **Vincent Lunardi** was the first aeronaut, ascending from Moorfields, London, September 15th, 1784. **Messrs. Blanchard** and **Jeffries**, who ascended at Dover early in 1785, it appears, were the first to cross the Channel, coming down safely at Calais. A few days afterwards (January 10th) the first ascent was made in Ireland, being from Ranelagh Gardens, Dublin. Blanchard introduced parachutes in August 1785. **M. Gay-Lussac** and **Biot** ascended at Paris, August 23rd, 1804; and the former to the height of 22,977 feet in September the same year. **Mr. Charles Green** was the first to apply coal gas for inflation, and made his first ascent in July 1821; he is said to have ascended from London with a horse in 1828, and took a small pony with him from Vauxhall Gardens in 1850. An extraordinary voyage was completed by the great Nassau balloon, which started from Vauxhall Gardens, London, with three "passengers," and after a journey of eighteen hours landed at Weilburg, in the Duchy of Nassau, November 1836. In September 1850 **Lieutenant Gale** was killed near Bordeaux; he had ascended with a horse, and on returning the people who held the ropes let go too soon, and Gale was found next day dashed to pieces. **M. Bixio** and **Barrol**, rising from Paris in 1850, went to the height of 19,000 feet, passing through a cloud 9,000 feet thick. In August 1852 some sensation was caused in London by the ascent of **Madame Poitevin** from Cremorne Gardens as "Europa" seated on a bull. Several subsequent ascents on horses, however, caused the police to interfere (1858), on the ground of cruelty to animals. **Mr. Welch** made aerial voyages for scientific purposes several times the same year. M. Poitevin ascended on a horse from Paris, 1858, reached the sea near Malaga, was nearly drowned, and died soon afterwards. In the month of June 1859, **Mr. Wise**, with three "companions," ascending from St. Louis in the United States, actually travelled 1,150 miles, coming down in Jefferson County, N.Y., the travellers being in an exhausted condition. By means of the encourage-

ment afforded by the British Association, **Mr. James Glaisher** commenced his series of experiments in the air with **Mr. Coxwell's** great balloon at Wolverhampton; he reached the height of five miles July 17th, 1862. On September 5th, 1863, **Mr. Glaisher** and **Mr. Coxwell** reached the height of seven miles above Wolverhampton; at five and three-quarters the former became insensible; **Mr. Coxwell** subsequently lost the use of his hands, but opening the escape valve with his teeth, the adventurous pair reached the ground in safety. **Mr. Glaisher** surveyed London from a balloon October 9th; and in January 1864 made the first winter ascent of the century, from Woolwich. He published his book "Travels in the Air" 1871. **M. Nadar** constructed a giant balloon containing 215,363 cubic feet of gas, which raised thirty-five soldiers at Paris in October 1863; and after other successful ascents he exhibited his balloon at the Crystal Palace, London, the same year. In the following year **M. Nadar** founded a Society for Aerial Navigation at Paris. **Mr. Coxwell** ascended at Belfast in July 1865 under somewhat startling circumstances, the balloon escaping after injuring several persons in trying to prevent it. In April 1867 it is recorded **Mr. Coxwell** had made 550 successful attempts. **Mr. Hodsman** crossed to Westmoreland from Dublin in April 1867. **Mr. Green**, who made 600 successful ascents, died March 27th, 1870, aged 84 years. **M. Dupuy de Lome** was successful with a navigable balloon carrying thirteen passengers at Vincennes, February 2nd, 1871. **Mr. (or Professor) Wise** in July 1873 proposed to make a daring attempt to cross the Atlantic from New York to Liverpool with a balloon 100 feet in diameter and 120 feet perpendicular, and a supplementary balloon 36 feet in diameter. The lifting power of these combined was 15,900 lb., a carrying power of 9,500 lb., and disposable ballast of 7,500 lb. In the following September the balloons were reported to be inadequate; a smaller one started, with a lifeboat attached, on October 6th; but was caught in a storm, coming down in Connecticut on the following day. **M. Vincent de Groof**, a Belgian artist, who described himself as the "Flying Man," made a successful ascent from Cremorne Gardens with a machine made to imitate the flight of a bird, June 29th, 1874, but was killed in another attempt during the next month. A new hot-air balloon (**Memier's**) was tried at the Crystal Palace on September 5th and October 16th, 1874, but it does not appear to have been successful. On April 15th, 1875, **M. Tissandier**, **Croce-Spinelli**, and **Sivel** ascended in the balloon *Zenith* from La Villette, near Paris; and, when 26,160 feet high, **Croce** threw out more ballast, causing the balloon to rise much higher, **Tissandier** being the only one of the party recovered alive. **Mr. Washington J. Donaldson**, a well-known American aeronaut, was lost in Lake Michigan during a storm the same year. On September 4th, 1880, the Balloon Society of Great Britain, founded in that year, with their headquarters at the Royal Aquarium, Westminster, having offered a silver medal for competition, five balloons started—the *Owl*, with **Mr. Wright** and **Commander Cheyne**, travelling forty-eight miles in the hour. An international contest followed in October, when **Mr. Wright** and **M. de Fouvillie**, of Paris, competed, starting from the Crystal Palace; both came down near Portsmouth. In January 1881 it was reported from France that **M. Giffard**

and **De Lome's** aerial ship with steering apparatus had proved successful. **Mr. Walter Powell, M.P.**, after crossing the Bristol Channel and proceeding to Hereford, ascended with **Captain Templar** and **Mr. Agg-Gardner** in the War Office balloon *Saladin* from Bath; on coming down at Bridport (December 10th, 1881) the two latter fell out, both being more or less injured, and the *Saladin* floated over the headland seaward with **Mr. Powell**. He was never seen again; but it was afterwards reported that some remains of a balloon were discovered in Spain (January 1882). **Colonel Burnaby** crossed the Channel, landing at Caen March 23rd, 1882. **Mr. Simmons**, rising from Maldon, Essex (June 1882), reached Arras, 140 miles, in 1 hour 20 min.; the same aeronaut, with **Sir Claude de Crespigny**, went from Maldon to Oudekerk, near Flushing, 140 miles, but the journey took six hours (August 1883). Several cross-Channel voyages occurred about this time. **M. Gaston** and **Tissandier** in October 1883 reported the successful construction of an electrical balloon. In August 1884 **M. L'Hoste** crossed the Channel, and again later; and **Gen. Brine** went from Hythe to Hervelingen (Aug. 15th). **M. Renard** is reported to have navigated a balloon by electricity in August 1884. **M. Tissandier** reported a successful experiment the following month, and **M. Renard** reported another in November.—There is in existence a French Balloon Society, authorised in September 1872; the English Society already mentioned, besides the Aeronautical, founded 1866; and a German Aeronautical Society, Berlin, 1881.—**Military Ballooning.** The science for purposes of war has not been neglected. **M. Guy de Morveau** is said to have obtained valuable information by this means at the battle of Fleurus (1794); they were used at Solferino (1859), and by the Federals near Washington (July 1861). During the siege of Paris the balloon was of much service, an aeronaut, **M. Durnof**, carrying the mail bags to Tours (September 1870). There were also postal balloons between Metz and Paris. **M. Gambetta** escaped from Paris in a balloon (October 1870). The military adoption of aerial navigation was formally announced at Woolwich April 1879. A captive balloon was used at the Brighton review, March 29th, 1880, and near Suakim March 1885. It was reported in 1885 that **M. Tissandier** had succeeded in taking photographs at altitudes of from 600 to 1,100 meters, the time of exposure being one-fiftieth second. (See also Haydn's "Dictionary of Dates," Turnor's "Astra Castra," and Glaisher.)

Baltzer, Prof. See OLD CATHOLICS.

Bambara. See SOUDAN.

Bamberger, Dr. See GERMAN POLITICAL PARTIES.

Bandon, James Francis Bernard, 4th Ear of (creat. 1800); b. 1850, and succeeded his father 1877. A representative peer for Ireland (1881).

Bangor, James Colquhoun Campbell, D.D., Bishop of (founded 516), was b. 1813, consecrated 1859. Formerly Archdeacon of Llandaff.

Bangor, Henry William Crosbie Ward, 3rd Visct. (creat. 1781), b. 1828, and succeeded to the title 1881. Served in the Kaffir war (1851) with the 43rd Regt. Irish representative peer.

Bangweolo Lake. See CONGO FREE STATE.

Bank Holidays. The Act, which declared that certain days in the year should be kept as public holidays, was brought in by Sir John

Lubbock, and passed May 25th, 1871. The holidays are, in

England and Ireland:

Easter Monday.

Whit Monday.

First Monday in August.

Boxing Day (unless Sunday).

Scotland:

New Year's Day,

Christmas Day,

(but should either fall on Sunday, then the following Monday).

Good Friday.

First Monday in May.

First Monday in August.

Bank of England. The business of banking had its origin with the Florentine and other Italian goldsmiths, many of whom settled in Lombard Street, London, about the middle of the seventeenth century, and were there practically pawnbrokers; though the advantages of cheque drawing and negotiation, in lieu of cash payments, soon became apparent and were adopted. The Bank of England was projected by William Paterson, whose proposal for the same was laid before the Government in the year 1691. Three years later the Bank was established, starting its operations with a loan to the Government of £1,200,000 at 8 per cent., secured on taxes. The Bank Charter, granted for eleven years, appointed a governor and twenty-four directors to be elected annually from members of the company who were possessed of at least £500 stock. The business of the Bank was, by its charter, limited to dealing in bullion and bills of exchange, and it was prohibited from lending money to the Crown without the sanction of Parliament. In its early years the Bank met with the greatest opposition from the Goldsmiths, and before 1797 went through several crises—notably that of 1720, when the "South Sea Bubble" burst, involving the Bank in a loss of £2,000,000; that of 1745, due to a run upon it owing to the Jacobite Rebellion (which was only averted by the Bank paying claims in sixpences); and that of 1792, when some fifty country banks failed, owing to their excessive note issue. In 1797 a great run upon the Bank took place, chiefly caused by the call upon bullion for the war, and the timidity of depositors. Cash payments were suspended, and a later Parliamentary Bill prohibited the payment of more than £1 in coin and the loan of more than £600,000 to the Government, repealing a previous Bill (1777), which had limited notes to £5 and upwards. This Bill was itself annulled in 1819, so far as cash payments were concerned; and at another crisis, in 1825, the Bill of 1777 as to note issue was reinstated. By the same Bill (1825) joint-stock banking was made generally permissible. In 1833 Bank of England notes were made legal tender (except at the Bank itself), thus averting the chief dangers of runs upon banks. In 1844 Sir R. Peel brought in his "Bank Charter Act," which limited the note issue of the Bank of England to £14,000,000 (unless a similar value in bullion were in hand) against a like amount lent to Government; confined all note issue to existing banks that were not within sixty-five miles of London, and limited them to their then powers of issue. It further enacted that the Bank of England should for these concessions pay the Government an annuity of £180,000, and the profits on all note issues over £14,000,000, and that the Government should pay the Bank for

its financial management of the National Debt a percentage on the same, then amounting to £248,000, but now reduced to £201,594. The Act also gave all banks power to accept bills of exchange, and to sue and be sued. The Companies Act, 1863-78, now regulate all banks other than the Bank of England.

Bankruptcy Act, 1883. Upon the commission of an act of bankruptcy by a debtor, any of his creditors (with certain exceptions specified by the Act) may present to the court a bankruptcy petition verified by affidavit. Upon this petition the court may make a receiving order, whereby an official receiver (appointed by the Board of Trade) is constituted receiver of the debtor's property. This order is followed by a public sitting of the court, at which the debtor is examined as to his affairs. A general meeting of creditors is to be held as soon as may be after the making of the receiving order, and is to decide whether or no the debtor is to be adjudged bankrupt. A composition must be approved at a subsequent meeting by a majority in number representing three-fourths in value of the creditors, and must be confirmed by the court. If a composition is not accepted, the debtor must be adjudged bankrupt, and the creditors may either appoint a trustee in bankruptcy, or leave his appointment to the committee of inspection (a committee of not less than three, nor more than five, chosen by the creditors from among themselves, meeting at least once a month, and looking after their interests). The debtor must attend the first meeting of his creditors, and give such information as they require, besides giving, at all times, any information useful in the realisation of his property and its distribution among his creditors. At any time after adjudication the bankrupt may apply for his discharge, which the Court may grant at its discretion, but not if he has committed any misdemeanour under the Act, or under Part II. of the Debtors Act 1869. An adjudication of bankruptcy disqualifies for sitting in either House of Parliament, and for acting as justice of the peace, town councillor, guardian of the poor, etc. The disqualification ceases if the adjudication be annulled, or if he be discharged with a certificate that his bankruptcy was occasioned by no misconduct on his part. The property divisible among the creditors does not include the bankrupt's tools (if any), or the necessary bedding and apparel of himself, his wife, and children, not exceeding £20 altogether. The first dividend is to be declared and distributed within four months after the first meeting of creditors, and subsequent dividends at intervals of not less than six months. In the distribution, all local rates due at the date of the receiving order which have become payable within the twelve months preceding, all taxes assessed up to the 5th April next before the date of the receiving order, and not exceeding one year's assessment, and all wages of any servant, clerk, labourer, or workman due in respect of services rendered within four months before the date of the receiving order, and not exceeding £50, must be paid in full in priority to all other debts. Any person to whom rent is due from the bankrupt may either before or after the commencement of the bankruptcy distrain upon the bankrupt's goods for one year's rent. The Act does not, except in so far as expressly provided, extend to either Scotland or Ireland. The courts having juris-

diction in bankruptcy are the High Court and the county courts.

Bankruptcy of Peers and Members of Parliament. See PRIVILEGES OF PEERS AND MEMBERS.

Bannerman, Mr. H. C., M.P., P.C. See CAMPBELL-BANNERMAN.

Banolas, M. See FIRE EXTINCTION.

Banting, implying "dieting with a view to reducing corpulence," is derived from the patronymic of a Mr. William Banting, who about twenty-five years ago circulated or sold a very large number of letters urging corpulent people to abstain from the use of sugar and starchy substances, basing his recommendation on his own experience.

"Baptistet." See NOMS DE PLUME.

Baptists. The Baptists hold that the only Scriptural mode of baptism is by immersion, and that the proper subjects are believers. Any other baptism they consider to be contrary to the original institution; contrary to the example of Christ; and also opposed to the spiritual design of the ordinance. In early times those holding baptistic views, with others who clung to primitive customs, were bitterly persecuted by the dominant party, and branded as schismatics and heretics. Historians, themselves not Baptists, have shown that through the centuries baptistic views have been held amongst the Waldenses, the Albigenses, the Vaudois, the Lollards and Wycliffites. Formerly, on the Continent and in England, they were opprobriously called **Anabaptists**. In 1537 Henry VIII. issued a proclamation against their heresy, as persons who rebaptised themselves. The first English martyr, in 1400, W. Sawtree, held Baptist principles; so also the last martyr, in James I.'s reign, Edward Whightman, was a Baptist. They began their separate existence in 1633, at a meeting-house in Wapping. As early as 1611, many Baptists, because of persecution, fled to America, and the feeble remnant in London published a **Confession of Faith** in 1611, to vindicate their orthodoxy. In 1620 they memorialised the king for liberty of worship. **Confessions of Faith** they published again in 1644 and 1646. In 1689 a **General Assembly** of Baptists in London published a confession in thirty-two articles, and a Baptist Catechism, after the model of the Assembly's Catechism. Though Baptists do not formally subscribe to any creed, yet there is singular harmony of belief throughout the body. Almost from the time of the Reformation Baptists have been divided in two sections: the "**Particular**" (or Calvinistic), and the "**General**" (or Arminian) Baptists. The "**Particular**" Baptists, by far the larger body, numbered in 1885, in the United Kingdom, 2,713 churches, 3,654 chapels, with 1,180,984 sittings, 1,893 pastors, 4,003 evangelists or unpaid preachers, 315,939 church members, 472,730 Sunday scholars, 49,442 teachers. The colleges for training the rising ministry are: Bristol, founded 1770; Regent's Park, 1810; Rawdon, Bradford, 1804; Haverfordwest, 1839; Pontypool, 1836 (formerly Aber-gavenny) 1807; Llangollen, 1862; Manchester (Brighton Grove), 1873; the Metropolitan, Pastor's College, 1861; Scotland, the Theological Institute, 1869. The Baptist Foreign Mission originated in 1792; income in 1884, £71,442 19s., including £8,385 from missionary churches. Baptist churches are congregational in government, holding to the primitive order

of pastors (bishops) and deacons. The interests of different counties are cared for by 42 county associations; and the wider affairs of the denomination are attended to by the "**Baptist Union**," formed in 1831—which Union, while it has no legislative authority, is adapted to secure united action throughout the whole country. Of late years Home and Irish missions have become affiliated with the Union, under one executive. Many of the General Baptists early merged into Socinianism, so that in 1770 the "**New Connexion**" (Evangelical) became the true exponent of General Baptist views in the country. They have one college for the training of the ministry, at Nottingham, formed in 1797, and also separate foreign and home missions; but they are affiliated with the Union for general and united action in Christian work. There are 192 churches, 130 pastors, 25,826 members. Outside the Baptist denomination there are the **Scotch Baptists**, with a plural eldership. In England there are some 300 **Hyper-Calvinistic** churches, having no missionary organisation and few Sunday-schools. There are also two **Seventh-Day Baptist Churches** in the country. It is computed that in the world at large there are 31,296 churches, 19,888 pastors and missionaries, 2,826,582 communicants.

Bara. See MADAGASCAR.

Barbecue. "To barbecue" is a term used in the West Indies for roasting a whole hog upon a gridiron; the word is found used in this sense by Pope, also by Lamb in "Essays of Elia." "A barbecue" has been adopted in America as a term to express any great gathering of people, where a large animal, such as an ox or a hog, is dressed whole and partaken of by those assembled.

Barbers, The Worshipful Company of. See CITY GUILDS, THE.

Barbour, Mr. William Boyle, M.P., was b. 1828. Formerly engaged in mercantile pursuits—South American trade. Returned in the Liberal interest as member for Paisley (1885).

Barclay, Mr. James William, M.P., was b. 1832. Educated at Univ. of Aberdeen. Engaged in business as a merchant. Returned in the Liberal interest as member for Forfarshire (1872-85); re-elected 1885.

Barclay's Bill. See LAND QUESTION, THE.
Barlow, Peter William, F.R.S., M.I.C.E., d. May 20th, 1885. In the early part of his career he was engaged in the construction of the Liverpool and Birmingham canal and the new London Docks. Subsequently he was engaged under the late Sir William Cubitt on the South-Eastern railway system, and, as principal engineer, constructed the North Kent, the Reading and Reigate, the Tonbridge and Hastings, and other important adjuncts of that system.

Barnes, Mr. Alfred, M.P., was b. 1823, and is an extensive coal owner, and J.P. for Derbyshire. Mr. Barnes sat in the Liberal interest as member for East Derbyshire (1880-85). Elected for the Chesterfield Division (1885).

Barometer. See METEOROLOGY.

Baronets Deceased, 1885. See OBITUARY, APPENDIX.

Barrett. See FENIANS.

Barrett, Wilson, the distinguished actor, was b. 1846. He entered the stage from choice; his first engagement was at Halifax (1864), subsequently visiting Leeds, Blackpool, and Leicester. Became manager of a theatre in Lancashire.

Not being very successful, he again sought engagements and played at Aberdeen. Afterwards Mr. Barrett married Miss Heath, an artiste, and together, with much success, they performed in the provinces. Mr. Barrett's first appearance in London was at the Surrey Theatre, in "East Lynne." In 1879 he took the Court Theatre, and was most successful in "Romeo and Juliet," in conjunction with Mlle. Modjeska, and (1881) became lessee and manager of the Princess's Theatre. Mr. Barrett achieved much reputation in "The Lights o' London" (1881), "The Romany Rye" (1882), "The Silver King" (1882), "Claudian" (1883), "Chatterton" (1884), "Hoodman Blind" (1885), "Sister Mary" (1886), and especially in his representation of "Hamlet" (1884). Mr. Barrett is also the lessee of the Grand Theatre, Leeds, and the Theatre Royal, Hull.

Barrier Reefs. See CORAL REEFS.

Barrington, George William, P.C., 7th Visct. (creat. 1720); Baron Shute (1880), by which title he sits in the House of Lords; b. 1824, and succeeded his father 1867. Unsuccessful candidate for Buckingham (1859). M.P. for Eye (1866) till his elevation (1880). Was private secretary to the late Earl of Derby.

Barrogill, Baron. See CAITHNESS.

Barry, Mr. John, M.P., was b. 1845. He is a floorcloth and linoleum manufacturer at Kirkcaldy. Founded the Home Rule Confederation of Great Britain. Returned as a Nationalist for Co. Wexford (1880-85); South Wexford (1885).

Barry, Mr. T. Woolf. See ENGINEERING.

Barthélemy-Saint-Hilaire, Jules, French statesman and philosopher; b. in Paris August 19th, 1805. At an early age he was a regular contributor to the *Globe*. In July 1830 he signed the memorable protests of the journalists. He was appointed in 1834 teacher of French literature in the Polytechnic School. In 1838 he was appointed to the chair of Greek and Latin philosophy in the College of France, and gained admission to the Academy of Moral and Political Science in 1839. In 1840 he was for a short time associated with Mr. Cousin, Minister of Public Instruction. After the Revolution of 1848 M. Barthélemy-Saint-Hilaire was returned to the Constituent Assembly by the Department of Seine-et-Oise. After the *coup d'état* (December 2nd, 1851), he refused, as a professor, to take the required oath, and resigned his chair in the College of France, and returned to his literary labour. He was a member of the committee to examine the scheme of M. de Lesseps for constructing the Suez Canal. In 1869 he was returned to the Chamber of Deputies by the Department of Seine-et-Oise. After the Revolution of 1870, and during the siege of Paris, he remained in that city. After the armistice he joined the Left in the National Assembly, and was one of the members intrusted to assist the Government in the negotiation of peace with Prussia. He was elected to the Senate December 1875. In 1877 he was decorated with the Legion of Honour. He held the office of Minister of Foreign Affairs (1880), under M. Ferry.

Bartley, Mr. George C. T., M.P., of St. Margaret's House, Victoria Street, S.W., was b. 1842. Educated at Clapton, and Univ. Coll. Held a Government appointment in the Science and Art Dept. for over twenty years. Is J.P. for Middlesex. Founded the National Penny Bank (1875). Returned in the Conservative interest as member for North Islington (1885).

Barttelot, Sir Walter Barttelot, C.B., M.P., was b. 1820. Educated at Rugby. Lieutenant, 1st Battn. Sussex Rifle Volunteers. Formerly capt. 1st Royal Dragoons. Deputy Lieutenant and J.P. for Sussex. Created a baronet (1875). Returned in the Conservative interest as member for West Sussex (1860-85); North-West Sussex (1885).

Basketmakers, The Worshipful Company of. See CITY GUILDS, THE.

Bass, Sir M. Arthur, M.P., M.A., was b. 1837. Educated at Harrow and Trin. Coll., Cambridge. He is a Deputy Lieutenant for Staffordshire and J.P. for Staffordshire and Derbyshire. Director of Bass & Co. (Limited). Returned in the Liberal interest as member for Stafford (1865-68); East Staffordshire (1868-85); Burton Division (1885).

Bass, Mr. Hamar Alfred, M.P., was b. 1842. Educated at Harrow. He is J.P. for Staffordshire. Hon. major 4th Vol. Battn. Prince of Wales's Regt. Returned in the Liberal interest as member for Tamworth (1878-85); West Staffordshire (1885).

Basutoland. A native province of British South Africa. It lies enclosed between Natal, the Orange Free State, the Transkeian Territories, and Cape Colony. Area, 10,293 sq. miles; pop. 127,700, of whom only 469 are whites. It is described as a land of grass and mountain, with beautiful scenery, a fertile soil, and a delicious climate. The Basutos, or Mountain Bechuanas, are a brave and intelligent people, and have probably made the greatest advance in civilisation of any of the South African races. Since 1848 the Basutos, under their chief Moshesh, have been under a semi-protectorate of the British. In 1868 their country was more formally annexed, and in 1871 it was joined to Cape Colony. But in 1879 a section of them, under the chief Moirosi, revolted. The first reason for this was the arrest for horse stealing, and rescue, of the chief's son; the second, the attempted enforcement of an act passed for the disarmament of the native tribes. The Cape Government also proposed to confiscate the territory of offenders. Almost the whole tribe of Basutos rose in arms, and the Cape forces were unable to reduce them. They made overtures in 1881, and submitted to the arbitration of the High Commissioner. Eventually the obnoxious act was repealed, and confiscations and fines were not enforced. The Basutos desired to remain British subjects, but objected to be ruled by the Cape Government. In compliance with their wish, Basutoland was disannexed from Cape Colony in 1883, and has since been administered as a protectorate, under the direct authority of the Crown.

Bateman, Mr. James. See ENGINEERING.

Bateman, William Bateman Bateman Hanbury, and Baron (creat. 1837); b. 1826, and succeeded his father 1845.

Bates, Sir Edward, M.P., of Manydown Park, Hants, was b. 1816, and is a merchant and shipowner. Deputy Lieutenant and J.P. for Lancashire, and J.P. for Hants. Returned in the Conservative interest as member for Plymouth (1885).

Bath, John Alexander Thynne, 4th Marq. of (creat. 1789); b. 1831, and succeeded his father 1837.

Bath and Wells, Rt. Rev. Lord Arthur Charles Hervey, D.D., 69th Bishop of (founded 905), fourth son of the 1st Marquis of Bristol

b. 1808. Educated at Eton and Trin. Coll., Cambridge; M.A. (1830), when he was 6th in 1st class in classics. Ordained deacon (1832), priest (1833); was rector of Ickworth (1833) and of Horningsheath (1853-69). Archdeacon of Sudbury (1862) until his elevation to the episcopal bench, (1869).

Bath, Order of the. Originally established by King Henry IV., at his coronation, 1399. The order was remodelled by the Prince Regent in 1815, and now has three classes, each with Military and Civil (nominal) subdivisions:—

G.C.B. . Knight Grand Cross Bath.

K.C.B. . Knight Commander Bath.

C.B. . Companion Bath.

Its badge is a crimson ribbon, with motto "*Tria juncta in uno*" ("Three joined in one). There are at present:—

	Military.	Civil.	Hon.
G.C.B.s . . .	44	23	17
K.C.B.s . . .	133	79	17
C.B.s . . .	754	247	17

Excluding the Sovereign, the Prince of Wales, and the Duke of Cambridge.

Bathurst, Allen Alexander, 6th Earl (creat. 1772); b. 1832, and succeeded his uncle 1878. Was M.P. for Cirencester (1857-78). The 2nd Earl was Lord Chancellor (1771-78).

Batley. See WASTE MATERIALS, UTILISATION OF.

Batoum. A port situated on the Caucasus side of the Black Sea, south of that range, acquired by Russia from Turkey by virtue of the Treaty of Berlin. Throughout the campaign it was skilfully defended by Dervish Pasha, who defeated every attempt of the Russians to take it. When, at the close of the war, the place was surrendered, Russia, in accordance with the Treaty, dismantled the fortifications and threw it open as a free port. The latter circumstance contributed largely to promote its prosperity; and the growth of the town was accelerated when in 1883 Russia connected it by railway with the Transcaucasian line, and made it, instead of Poti, the main outlet of Transcaucasia. Latterly the development of the Caspian petroleum trade has swollen its exports to such an extent that the Russian Government has sanctioned a scheme for enlarging its excellent but restricted harbour into a great commercial port. At the same time an arsenal has been established just outside the limits of the *porto franco*, connected by the railway and a tramway with the port itself, so that, in the event of a war, the Turkish redoubts, which are still standing, could be rapidly equipped afresh, and Batoum would prove an admirable naval station for the Russian fleet. At the same time the Russians have also connected it by a good military road with Kars, thus rendering it possible, on the eve of a war, to send from Odessa, *via* Batoum, large reinforcements to Asia Minor.

Baumann, Mr. Arthur Anthony, M.P., was b. 1856. Educated at Wellington Coll., and Balliol Coll., Oxford. Called to the bar at the Inner Temple (1880). Returned as member for Peckham in the Conservative interest (1885).

Bazaine, François Achille, a French general, b. February 13th, 1811. Joined the army

1831, served in Africa 1832, made lieutenant 1837, and obtained the Cross of the Legion of Honour. He distinguished himself in Algiers in 1839. Joined the Mexican expedition in 1862 with the rank of General of Division, remaining there until 1867, when he effected his retreat by Vera Cruz. In 1864 he had been made a Marshal of France. In the Franco-Prussian war he commanded the Third Army Corps, when he occupied Metz, where, after a seven weeks' siege, he capitulated with an army of 175,000 men. Summoned before the Military Commission of the National Assembly, August 1871, he was tried by court martial and found guilty of treason, and condemned to death and degradation. The sentence was commuted to twenty years' seclusion in the Isle Ste. Marguerite, from which he escaped. Bazaine has since resided in Spain.

B. B. See MINERALOGY.

Be. See TOGO-LAND.

Beach, Mr. William Wither Bramston, M.P., of Oakley Hall, near Basingstoke, and Keevil House, Trowbridge, son of the late Mr. Beach, of Oakley Hall, formerly M.P. for Malmesbury. Was b. 1826. Educated at Eton and Christ Church, Oxford, where he graduated M.A. J.P. for Hampshire, and captain in the Hants Yeomanry Cavalry. Entered parliament in the Conservative interest as member for North Hants (1857-85); West Hants (1885).

Beaconsfield, Benjamin D'Israeli, Earl of. Son of Isaac D'Israeli, of literary renown; b. Dec. 21st, 1805. He was educated at a small school at Walthamstow, and was afterwards placed with Messrs. Swan, Stevens, & Co., solicitors, of Old Jewry. His entry into fashionable life was marked by the friendships which he contracted with Mr. E. Lytton Bulwer and Lord Lyndhurst. Shortly afterwards he made a journey to the East, and visited Constantinople, Syria, Palestine, Egypt; returning *via* Italy and Spain. In June 1832 he unsuccessfully contested the borough of Chipping Wycombe, Bucks, in the Radical interest; and a short time afterwards again tried the same constituency, and failed. In 1834 he joined the Tory party, and offered himself for High Wycombe, and three months later Taunton, but without success; he was however, in 1837, returned as one of the two members for Maidstone, his colleague being Wyndham Lewis, whose widow D'Israeli married in 1839. In 1839, on the outbreak of the Chartist riots, Mr. D'Israeli apparently endorsed their views, supporting the motion in their favour brought forward in the House of Commons by Mr. Attwood. Though at first a supporter of Sir Robert Peel, soon after the general election of 1841, at which D'Israeli was returned for Shrewsbury, he violently opposed the motion of his former ally for the abolition of the corn laws. On the death of Lord George Bentinck (1848), Mr. D'Israeli, whose talent had been generally recognised, took the leadership of the Conservative party, and in 1852 took office as Chancellor of the Exchequer in Lord Derby's administration, which was defeated on the budget question, the plan of which was set forth by Mr. D'Israeli (1852). In February 1858 Lord Derby again became Prime Minister, and Mr. D'Israeli Chancellor of the Exchequer. In 1859 he introduced a bill for the reform and extension of the franchise; the bill was lost, and the Ministry resigned. In 1866 Lord Derby for a third time became Prime Minister, and

D'Israeli again Chancellor of the Exchequer. In February 1868 Lord Derby resigned the premiership and was succeeded by D'Israeli. The general election of 1870 resulting in a large majority for the Liberals, Mr. Gladstone assumed the reins of government, and Mr. D'Israeli became leader of the opposition. A peerage was offered him, but he declined it—accepting the honour, however, for his wife, on whom the title of Viscountess Beaconsfield was conferred. She died on Dec. 15th, 1872. After the general election of 1874 Mr. D'Israeli became again Prime Minister, and in August 1876 he accepted the peerage which was again offered to him, becoming Earl of Beaconsfield. He took his seat in the upper house, Sir Stafford Northcote (see IDDESLEIGH, LORD) succeeding him in the Commons; but until 1880 Lord Beaconsfield acted as chief of his party. In the spring of 1880 he appealed to the country on the budget of 1879; and, parliament being dissolved, the general election gave such a majority to the Liberal party that Mr. Gladstone succeeded as Prime Minister. Lord Beaconsfield's last tenure of office is rendered remarkable by the Royal Titles Bill (1876), by which the Queen assumed the title of Empress of India; the purchase of the majority of the Suez Canal shares by Government; the passage of the Dardanelles by the English fleet, when Constantinople was threatened by the Russians at the close of the Russo-Turkish war; the proposed employment of native Indian troops when negotiations were strained between Russia and this country; the secret treaty with Turkey by which Cyprus was ceded to England; and the Congress at Berlin (see BERLIN CONFERENCE), at which Lord Beaconsfield attended as English plenipotentiary, in company with Lord Salisbury, and by his firmness and political sagacity gained for himself the friendship of Prince Bismarck, and for his country "Peace with honour." For this service he was created K.G. His political career was marked by subtle, epigrammatic, original and thoughtful oration; extraordinary foresight, and a bold, if not always successful policy to preserve intact the integrity of the English empire. He died April 19th, 1881. The late Earl was a Royal Commissioner of the Exhibition of 1851; member of the Privy Council; Lord Rector of Glasgow University (1872 and 1874); Hon. D.C.L. of Oxford (1862); Hon. LL.D. of Edinburgh, and F.R.S., etc., etc.; a Governor of the Charterhouse and of Wellington College.

Beadel, Mr. William James, M.P., of Springfield Lyons, Chelmsford, was b. 1828. Returned in the Conservative interest as member for Mid Essex, Chelmsford Division (1885).

Beauchamp, Frederick Lygon, P.C., 6th Earl (creat. 1815); b. 1830, and succeeded his brother (1866). Fellow of All Souls', Oxford (1852); Hon. D.C.L. (1870); was a Lord of the Admiralty (1859), and Lord Steward of the Queen's Household (1874-80). Has been Paymaster-General (1885). Was M.P. for Tewkesbury (1857), and for West Worcestershire (1863-66).

Beaufort, Henry Charles Fitz-Roy Somerset, P.C., 8th Duke of (creat. 1682); b. in Paris 1824, and succeeded his father 1853. Was aide-de-camp to the Duke of Wellington (1842) and to Visct. Hardinge (1852). Master of the Horse to the Queen (Feb. 1858 to June 1859,

and July 1866 to Dec. 1868). M.P. for Gloucestershire (Feb. 1846 to Nov. 1853).

Beaufort's Scale. See METEOROLOGY.

Beaumont, Mr. Henry Frederick, M.P., was b. 1833. Educated at Eton and Trin. Coll., Cambridge. He is a Deputy Lieutenant for the West Riding, and J.P. for the West and North Ridings. Returned in the Liberal interest as member for the South Division, West Riding, some years ago; Colne Valley Division, West Riding (1885).

Beaumont, Henry Stapleton, 9th Baron (creat. 1309), b. 1848, and succeeded his father 1854. The 1st peer, Sir Henry de Beaumont, was summoned to parliament in the reign of Edward II.

Bebel, Herr. See GERMAN POLITICAL PARTIES.

Bechuanaland. A large tract of country in Southern Africa, north of Cape Colony, and between Transvaal and Kalahari desert. The *Cis-Molopo* portion of this territory, which has during the last fifty years made much progress in civilisation under Moffat, Livingstone, Cassalis, and other missionaries, has lately been the scene of many disturbances on account of the inroads of certain filibusters, Boers (*q.v.*) and others, determined to take possession of the fertile and well cultivated lands of the Bechuanas (pr. *Betahwana*) and drive them further towards the Kalahari desert, which has hitherto been used chiefly as a hunting ground by various tribes. Two new republics were set up by these white men—*Land-Goschen* and *Stallaland*—each governed by an executive with high-sounding titles, who, besides depriving the nations of their rights, sanctioned various outrages upon certain British subjects who ventured to oppose them. This at length led the Imperial Government to send out a considerable force under Sir Charles Warren (*q.v.*), with instructions, issued Nov. 10th, 1884, "To remove the filibusters from Bechuanaland; to restore order in the territory; to reinstate the natives on their lands; to take such measures as may be necessary to prevent further depredation; and finally, to hold the country until its further destination is known." These instructions have been carried out as far as possible, Sir Charles Warren having met with little or no opposition from the Boers, and having been everywhere welcomed with hopefulness on the part of the natives. By arrangement with chiefs the country was taken under British protection. The limits of the Bechuanaland Protectorate are as follows:—West of the boundary of the South African Republic as defined by Convention of Feb. 1884, and extending to the 20th meridian of E. longitude, thus including part of Kalahari; north of Cape Colony as far as the 22nd parallel of S. latitude. The area thus defined is stated to be as large as Spain. Much of it is thickly wooded and well watered, intersected here and there with open plains in all the southern parts, while in the more northerly regions the immense plains are dotted with numerous "vleys" of fresh water, and those large salt "pans" or lakes of which so many are found in South and Central Africa. Gold, coal, and lead have been found in Bechuanaland; and as this vast country has not yet been subjected to scientific prospecting for its various mineralogical riches, it is reasonable to suppose that it is in reality no whit inferior in this respect to its neighbours, Matabeleland, the Transvaal, and Griqualand, countries known to be rich in the precious metals, diamonds, and

ml. (Consult "Proceedings of Royal Geographical Society," Jan. 1884, July 1885, and Feb. 1886.)

Bechuanas or **Botahwanas**. A people of the Bantu race, allied to the Kaffirs, inhabiting the central region of South Africa, north of Cape Colony. They are subdivided into tribal sections. The Bechuanas were first visited in the beginning of the present century. They are superior to the Hottentots, Korannas, and Bushmen, in language, manners, and customs, as well as in physical appearance. They were found living under the rule of tribal chiefs, who did not exercise despotic sway, as among the Zulu and Kaffir tribes (*q.v.*), but were controlled by the action of the headmen of the town, and by public assemblies or *pitshos*, which were regularly called for the consideration of public affairs. They subsisted by their gardens of millet, which were tilled by the women; by their flocks and herds; and by the produce of the chase. The men worked in iron and in copper; some were skilled in making wooden vessels for domestic use; and all the men were taught to dress the skins of the numerous wild animals in their neighbourhood. Irrigation and the better cultivation of the land were unknown; and in a season of drought, when the millet crop failed, they lived on game, roots, and berries. Missionaries and traders have wrought a great change. Village churches are found everywhere, and schools are well attended. The trader transacts his business in cash instead of by barter. The plough has largely superseded the hoe, the man doing the work, assisted only by the woman. The Bechuanas have of late years been much harassed by Boers and others, chiefly from the Transvaal, and more than once have sought to place themselves under the protection of the English Government, the chiefs ceding their territories and their people to the Queen; and from 1878 to 1880 the affairs of South Bechuanaland were partly administered by English officers in connection with Griqualand West; but when the latter country was annexed to Cape Colony, Bechuanaland was ignored, and soon became a scene not only of inter-tribal warfare, but of robbery and bloodshed on the part of designing and land-hungry white men. In 1885 an English force under Sir O. Warren (*q.v.*) entered the country, and the Bechuana chiefs, people, and territories were formally constituted a **British Protectorate**. Various Bechuana tribes inhabit the Transvaal and Orange Free State. A notable branch of the race are the Basutos, who are most forward in civilisation. (See **TRANSSAAL** and **BECHUANALAND**.)

Beckett, Sir E. See GRIMTHORPE.

Beckie, The Earl of, M.P., eldest son of the Marquis of Headfort, was b. 1844. Returned in the Conservative interest as member for Westmoreland (1871-85); re-elected, North Westmoreland, 1885.

"**Bede, Guthbert.**" See NOMS DE PLUME.

Bedford, Francis Charles Hastings Russell, 9th Duke of (creat. 1694); b. 1819, and succeeded his cousin 1872. M.P. for Bedfordshire from 1847 till he became a peer. The 1st peer was particularly favoured by Henry VIII., and in the reign of Mary filled the office of Lord Privy Seal; he was sent as ambassador to Spain to conduct Philip to England. Another member of the family was William Lord Russell, beheaded in 1683.

Bedford Park. An estate situated to the west of Hammersmith, between Turnham Green and Stamford Brook Green. Originally a few swampy meadows, about fifteen years ago it was bought by a speculative builder, who drained it and erected a perfect little colony entirely in "Queen Anne's style." It contains a handsome church, a school of art, a social club, theatre, a co-operative stores and shops, withavenued rows of houses.

"**Bee Master.**" See NOMS DE PLUME.

Bear Duty. See REVENUE, THE.

Beethoven, Ludwig Van, grandest amongst tone-poets, the son of a fairly good musician, was b. at Bonn in 1770. He began writing music as a mere child, though with very poor tuition to aid him; and was sub-conductor at the opera at twelve years old, and organist as well at fourteen. In 1787 he visited Vienna, and had a few lessons from Mozart, but returned to Bonn, where he now played viola in the opera band. In 1792 the Elector of Cologne sent him to Vienna at his expense. Here he now took lessons of Haydn and Albrechtsberger, and the Elector being dispossessed by the French, Beethoven was soon thrown on his own resources. He never left Vienna again. His wonderful force of mind, no less than his evident superiority to all musicians of all time, secured him a position at the oldest court in Europe. His life was always honourable, pure, and austere. He never married. About 1798 he began to grow deaf, and by 1802 had become very afflicted, as is shown by his pathetic letter to his brothers, called his "will" (exhibited at London in 1885 at the International Exhibition); he was, about 1816, perfectly deaf. This malady embittered Beethoven's later years. In 1826 he was much tortured by dropsy. He died in 1827. It is almost unnecessary to speak of the immortal nine Symphonies and colossal overtures, the greatest works we have for the orchestra, of "Fidelio" and the "Mount of Olives," of the two stupendous masses, of the pianoforte sonatas, the greatest works for the pianoforte, of the quartets and pianoforte trios, and of all the other wonderful works, vocal and instrumental, which we owe to his mighty genius.

Begum, an Indian word signifying Princess or Queen.

Beith, Mr. Gilbert, M.P. Is a Director of the Glasgow Chamber of Commerce. Returned in the Liberal interest as member for Glasgow, Central Division (1885).

Belbera. See RED SEA LITTORAL.

Belgium. A kingdom under Leopold II. of Saxe-Coburg. By constitution of 1831 Belgium is declared to be a constitutional and hereditary monarchy—executive power in King; legislative power jointly vested in King, Senate, and Chamber of Deputies. Deputies must be Belgians of twenty-five years of age, elected for four years (half the Chamber retiring every two years, except in case of dissolution, when all go out) by citizens of twenty-one years of age who have passed an elementary examination, belong to the professional classes, or who pay £1 13s. 6d. annually in direct taxes. One deputy allotted to each 40,000 of population; present number of Chamber is 138. Both senators and deputies are paid by State. Number in Senate half that of the Chamber; senators are elected by same electorate for eight years (half retiring every four years except on dissolution), to be forty years of age and pay taxes to annual amount of £84. Area, 11,378

square miles. Population about 5,800,000. Army in peace about 48,000; in war, 104,000. Navy consists of a few vessels for revenue and police purposes. Revenue in 1885 was £12,794,447; expenditure about £12,785,287. National debt about £85,000,000. No state religion.—1870. On the breaking out of the Franco-German war the army was mobilised and placed on the frontier, although the belligerents, at the instance of England after the publication of the secret treaties, had by treaty agreed to maintain the independence of Belgium; territory, however, not violated. Part of the French army was driven over the frontier near Sedan, and interned. The Liberals, who had held office for thirteen years, were overthrown by union of Roman Catholics and Radicals, and the D'Anethan cabinet succeeded. The elections of August 1870 confirmed the ministry, the Ultramontane majority being further increased by the passage of a reform bill enfranchising the lower classes in the provinces, chiefly Roman Catholics. The Liberals were much dissatisfied. Popular tumults took place in Brussels, and were suppressed by civic guard, but unpopularity arising therefrom forced the ministry to resign; succeeded by the Malou (a moderate) cabinet. At the communal elections of 1872 the Ultramontanes maintained their advantage, but the elections of 1874 considerably reduced their majority both in the Senate and Chamber. In July a European conference, held in Brussels to revise the rules of warfare, separated without coming to any definite decision. In May and June 1875 mob tumults arising from religious processions were repressed with loss of life. A Belgian, Duchesne, having written to a French archbishop offering to assassinate Bismarck, was tried, but acquitted, the Belgian law providing no punishment for such an offence. In consequence of remonstrances of German Government, Act passed making such offence criminal.—In 1878 Catholics in minority at elections; ministry resigned accordingly, and were succeeded by Frere D'Orban cabinet.—1879. In July, Act passed prohibiting interference of Roman Catholic clergy in general direction of elementary schools, the choice of books, etc., but providing that a room in each school should be at the disposal of ministers of religion, etc. In September a Roman Catholic Pastoral against above plan issued, refusing sacraments to teachers and parents.—1880. The jubilee of Belgian independence was celebrated in June. Bishops having denounced state schools as godless, at supposed instance of Papacy, the Nuncio received his passports, and the Belgian ambassador was withdrawn from Rome. Liberals obtained an increased majority in Chamber on elections. Budget not very satisfactory: half a million deficit.—1881. Legislation organising secondary teaching for girls, and depriving local bodies of right of interference in electoral disputes was violently opposed by clericals. Elections in Communal councils proved that government measures were approved by the country. Bishop of Mons deprived of his see by the Pope; in consequence clerical attacks on education law ceased.—1882. Liberal majority increased on elections. Treaty of commerce with France ratified. Budget not very satisfactory: deficit of £1,000,000 on account of expenditure on docks at Antwerp, and unproductiveness of state railways.—1883. Chambers passed bill adding to former qualification by pay-

ment of direct taxes, etc., a franchise acquired by passing an examination in the three R's. About 50,000 persons qualified under this law by end of year; 44 per cent. increase in provincial communal electors; persons whose educational attainments were patent—e.g., the professional classes—were also added to the electorate for life, without being required to produce any other qualification. A meeting between kings of Belgium and Holland took place, producing a cordial feeling between the two nations. Deficit in budget of £1,000,000 met by new taxes.—1884. Elections under new electoral law resulted in severe defeat to Liberals, and a Catholic ministry under Malou was installed. The cause of this defeat arose from additional taxation and proposed increase of 30,000 in army. As the Liberals retained small majority in the Senate, that body was dissolved, and on re-election the Roman Catholics had also a strong majority. The new ministry at once repealed the law of 1879 and proposed to hand over all matters relating to primary education to local bodies; in spite of Liberal protests and of outbreaks in Brussels the Senate voted the bill, and the King gave his consent. The communal elections showed however, so strong a feeling against the new law that its authors had to retire from the cabinet, and the law was considerably modified in detail. The budget was favourable, there being a small surplus of about £8,000.—1885. A newly founded Free State on the river Congo under the presidency of the King of Belgium was acknowledged by the principal Powers, and a conference was held at Berlin, in conformity with which Portugal yielded up the whole of the north bank of the Congo to the new state, retaining only a portion of the south. An International Exhibition on a large scale was held at Antwerp, with great success. The strict protectionist policy of Germany seems likely to divert to Antwerp a considerable portion of North German trade that formerly went to Hamburg.—1886. March, industrial riots, attended with great violence, in Liège, Mons, Chaleiroi, and other places. April 1. The Belgian budget for 1887 is estimated as under: Receipts, £13,317,713; expenditure £13,194,308.

"Bell, Acton," "Curren," and "Ellis." See NOMS DE PLUME.

Bellini, Vincenzo. One of the chief Italian opera composers, b. at Catania, in Sicily, 1801, his father being an organist of fair capacity. He was musically educated at Naples, immediately succeeding his rival, Donizetti, there "Il Pirata" made Bellini's fame in 1827. Other operas succeeded more or less; but in 1831 the young composer rose to the summit of his school with the melodious "Sonnambula" "Norma," equally popular, followed at the beginning of 1832, and "I Puritani" in 1834. The gifted composer, still but thirty-four, died at Paris in 1835. His great operas still keep the stage by their glorious power of melody.

Belmore, Somerset Richard Lowry-Corry P.C., 4th Earl of (creat. 1797), was b. 1835, and succeeded his father 1845. Elected a representative peer for Ireland (Jan. 1857); was Under Secretary for the Home Department (July 1866 to July 1867); Governor of New South Wales (1868-72).

Belper, Henry Strutt, and Baron (creat. 1856), was b. 1820, succeeded his father 1880. Was M.P. for East Derbyshire (1868-74), and

for Berwick (1880 till his succession to the peerage).

Beluchistan. The Afghan "barrier" may be roughly described as consisting of three sections—the country north of the Hindoo Koosh, including Balkh, etc.; the country south, including Cabul, Herat, and Candahar; and finally a barren region stretching south again to the Persian Gulf. This is Beluchistan, and contains a poor, scattered population of a few hundred thousand people, a weak native government completely under our control, and no towns of any notoriety except Quetta. This point was occupied by Viceroy Lytton in 1876, and in 1883 a protectorate over the whole of Beluchistan, to the Persian frontier, was established. By virtue of this protectorate we can place troops wherever we like in Beluchistan, Quetta itself being absolutely annexed; and the importance of this can be realised when we point out that if England took full advantage of the treaty she could locate a force on the north-west corner of Beluchistan, very much closer to Herat than Candahar is, and having more over easy country stretching all the way to the "key of India." The political and military advantages of Beluchistan have hitherto only been partially recognised by English statesmen; but the hour is approaching when it will be a fundamental principle of English policy to protect Herat and the Russian side of the Afghan barrier from a new base, formed by the Persian Gulf and West Beluchistan, in co-operation with the Quetta-Indus base. For some time past more than one Indian general has advocated a railway from Gwadur, or some other point on the Persian Gulf, to Herat, as a safeguard to Herat. The *Pioneer* (Calcutta) states (Feb. 28th, 1886) that the Bolan temporary railway is now complete to within two miles of the crest over which it is to pass to the plateau at Darwaza.

Benedict, Sir Julius, a pianist and composer of great excellence, b. at Stuttgart, 1804. He worked under Hummel and Weber, and was the friend of every musician of eminence. After conducting opera at Naples he took up his residence at London (1835). He at first conducted the Lyceum opera, wrote "The Gipsy's Warning," conducted at Drury Lane, and produced "The Brides of Venice" and "The Crusaders." He wrote "Undine" (1860), and "St. Cecilia" (1866), both for the Norwich Festival. The "Lily of Killarney" (1862), and "St. Peter," written for the Birmingham Festival (1870) appeared. From 1859 onwards Sir Julius was "conductor" (accompanist) of the famous Monday and Saturday popular concerts. His cantata "Graziella" was written for the Norwich Festival (1881). Sir Julius was knighted, 1871. He died 1885.

Bengal Tenancy Bill. One of the few legislative measures of the Indian Government that (like the Ilbert Bill) have attracted attention in England. For a long time past the relations between the *zemindar* or landholder and the *ryot* or cultivator had been unsatisfactory in Lower Bengal, though actual oppression on the one side or refusal to pay rent on the other was rare. In 1859 an act was passed creating a class of permanent tenants, and another class of occupancy tenants, whose rents could be enhanced only for certain specified reasons. But the great majority of the cultivators still remained mere tenants at will. In accordance

with the report of a commission appointed in 1879, a bill was introduced by Lord Ripon's Government conferring upon the tenants a transferable interest in their holdings, and protecting them against eviction by compensation for disturbance. At the same time facilities for the recovery of arrears of rent were conferred upon the landholders. After a prolonged and acrimonious discussion the bill was finally passed, in a modified form, by Lord Dufferin in the early part of 1885, and received the assent of Lord Randolph Churchill shortly after he was appointed Secretary for India.

Bennett, Mr. Joseph, M.P., of The Cedars, Louth, son of the late Mr. Bennett, J.P., of Grimsby, was b. 1829. Educated at the Wesley Coll., Sheffield. Is J.P. for the Parts of Lindsey, Lincs., as well as for the boroughs of Louth and Grimsby. Returned in the Liberal interest as member for Gainsboro' Division (1885).

Bennett, Sir W. Stenradale. Eminent English musician, the son of a musician, was b. at Sheffield 1816. He was a chorister at King's College Chapel, Cambridge, whence he was sent to the Royal Academy of Music, London. Mendelssohn heard some of his writings here, and at once received him as a friend, and introduced him to Schumann, when some liberal London musicians sent the young composer to Leipzig for further study. In 1849 he founded the Bach Society; he became conductor of the Philharmonic Society (1856); Professor of Music at Cambridge, and honorary Mus. Doc. (1866); Principal of the Royal Academy, and received the honour of knighthood (1871). He died in 1875. His cantata, "The May Queen," was produced at the Leeds Musical Festival (1858), and his fine oratorio, "The Woman of Samaria," at the Birmingham Festival (1867). His concert overtures, pianoforte works, and songs are all characterised by an exquisite finish.

Ben Nevis Observatory. Meteorologists in all countries are endeavouring to establish stations at as great elevations as is feasible. In the *United States* there are *Pike's Peak* (14,134 feet), and *Mount Washington* (6,299 feet); in *France* the *Pic du Midi* (9,380 feet), and the *Puy de Dome* (4,823 feet); in *Austria* *Hoch Obir* (6,706 feet); in *Switzerland* the *Sentis* (8,094 feet); and there are many others. The *Scottish Meteorological Society* has long had in view the erection of an observatory on the top of Ben Nevis, at a height of 4,406 feet, the highest point in these islands. This has now been carried out, the staff having entered into residence on the summit in October 1883. For the summers of 1881-82 the Society were indebted to the energy and self-devotion of *Mr. Clement L. Wragge*, who for the five months—June to October inclusive—in both years, actually ascended the mountain from the sea level at *Fort William* every day in time to take observations at 9 a.m.! In the summer of 1883 assistance was provided, and Mr. Wragge's ascents were not made daily. The situation of Ben Nevis is peculiarly interesting meteorologically. It is the most northern of the mountain observatories; the slope rises abruptly from the sea level, the horizontal distance of the summit from *Fort William* being only four miles; the mountain is situated in the region traversed by many of the storms which arrive in Europe from the Atlantic. The observations have been discussed by *Mr. A. Buahan*, and the results published by the *Scottish Meteorological Society*. As yet, however, the series of records

is too short to admit of the deduction of any very important conclusions, inasmuch as the steps towards such an end would be to determine trustworthy mean values for the upper station; to compare these with similar values for the sea-level, and if possible with those for stations of intermediate altitude (but these latter are not attainable at Ben Nevis); and finally to ascertain what normal differences are to be expected between the results of the different stations under various conditions of weather. The chief features of the climate of Ben Nevis which have been hitherto (January 1886) ascertained, are the following. The coldest month is February, the warmest July. The greatest difference in temperature between top and base obtains in May, the least in December. The extreme rates of decrease of temperature with elevation are 1° Fahr. in 270 feet in April, 1° in 296 feet in December. In hard frost, with a high barometer, the summit is warmer than the base. The daily range of temperature is slight, as the sun has not much effect on the air at the upper levels. The rainfall on the summit is very great. One of the most remarkable phenomena observable at such mountain stations is that the wind is stronger by night than by day,—the exact reverse of what occurs at low levels. At first it was supposed that observations from such mountain stations would be of great use in giving early intimation of coming weather; but this hope has not been realised, as in no country where such stations exist has it hitherto been found practicable to utilise the reports in weather forecasting. Thus, for instance, the barometer readings at the summit cannot be reduced to sea-level owing to ignorance of the distribution of temperature up the mountain side.

Bennigsen, Herr von. See GERMAN POLITICAL PARTIES.

Bentinck, Rt. Hon. George Augustus Frederick Cavendish, P.C., M.P., the only son of Major-General Lord Frederick Bentinck, C.B., and cousin of the Duke of Portland, was b. 1821. He was educated at Westminster School and Trin. Coll., Cambridge, and was called to the bar at Lincoln's Inn (1846). Has held office as Parliamentary Secretary to the Board of Trade (1874-5); Judge Advocate General (1875-80). Is a trustee of the British Museum, and is J.P. for Cumberland and Dorset. He took an important part in carrying measures of army reform, the Burials Act 1880 (*q.v.*), and the Married Women's Property Act (*q.v.*). Entered parliament in the Conservative interest as member for Taunton (1859-65), Whitehaven (1865-85). Re-elected 1885.

Beresford, Lord Charles, M.P., was b. 1846. He is brother of the present Marquis of Waterford. Joined the Royal Navy (1859). Was for some time commander of the Royal yacht *Osborne*. Took an active and prominent part in the late Egyptian campaign. Greatly opposed to the disestablishment of the Church of England, and is averse to Home Rule. Returned in the Conservative interest as member for East Marylebone (1885).

Beresford, The Most Rev. and Rt. Hon. Marcus Gervais, D.D., D.C.L. Oxon, the Lord Primate of Ireland, d. December 26th, 1885. He was b. in 1801; educated under Dr. Tate, at Richmond School, Yorkshire, and at Cambridge University. He became Vicar-General

of Kilmore and Archdeacon of Ardagh in 1851. He was subsequently appointed to the united see of Kilmore, Elphin, and Ardagh, which he filled until the year 1863, when he was translated to Armagh.

Beresford-Hope, Rt. Hon. Alexander James, M.P., was b. 1820. Educated at Harrow and Trin. Coll., Cambridge. M. Hope is Hon. D.C.L. (Oxon), Hon. LL.B. (Camb. and Dub.), and President R.I.B.A. (1856-67). He is J.P. for Kent and Staffordshire; P.C. (1880). He entered parliament in the Conservative interest, and sat for Macclesfield (1841-52 and 1857), Stoke-on-Trent (1865-8), Cambridge University (1868-85). Re-elected 1885. Author of "Letters on Church Matters," "The English Cathedral of the Nineteenth Century," "Worship in the Church of England," and numerous other pamphlets, papers, and articles.

Berkeley, George Lennox Rawdon Berkeley, 7th Earl of (creat. 1679), was b. 1827, and succeeded to the title 1882.

Berlin Conference. The International African Association, founded by Leopold II., King of the Belgians (*q.v.*), had succeeded, through the medium of Mr. H. M. Stanley and his sulordinates, in establishing various stations upon the banks of the Congo. This, together with the colonising aspirations of certain Powers, had drawn universal attention to African affairs. In 1884 a treaty was concluded between Great Britain and Portugal, by which the West African coast about the mouth of the Congo was recognised as belonging to the latter power. It was a new departure in British policy, which had hitherto resolutely refused to admit Portuguese claims over the territory in question, and Earl Granville remains responsible for it. The colonial system of Portugal is exclusive, and the International African Association saw its outlet blocked by hostile tariffs and restrictions. It had made over 450 treaties with African potentates, thereby acquiring sovereignty along the upper river; and now, in despair, signed an agreement with France, whereby that power should become heir to the acquisitions of the Association in case it ever desired to relinquish them. But the Anglo-Portuguese Treaty met with general disfavour, the Powers refused to ratify it, British chambers of commerce protested against it, and public feeling in the United States was aroused. The United States Government then took the step of recognising the International African Association as a sovereign and independent power, having as its emblem a blue flag bearing a golden star. Prince Bismarck now became interested in the matter and invited delegates from the Powers to Berlin in order to fully discuss and settle the African question. Plenipotentiaries were sent by Great Britain, France, Austria, Belgium, Holland, Denmark, Spain, Portugal, America, Italy, Russia, Sweden, and Turkey, to meet those of Germany, under the presidency of Prince Bismarck. The sittings began November 15th, 1884, and lasted till February 26th, 1885, when the final act was signed by all the Powers represented. The Powers, by individual treaty, recognised the Association, now called the Congo Free State, as a sovereign Power. Its territory was delimited. (See CONGO FREE STATE, and WEST AFRICAN COAST.) It was awarded a sea-board from Banana to Cabombo, 22 miles; the north bank of the Lower Congo, as far as the cataracts, an

beyond Likona above Stanley Pool; the south bank beyond Nokki. In the interior it embraces the greater part of the basin of the Congo and its affluents, extending from the Chambezi sources northward to 4° N. lat., and from Lake Tanganyika westward to the Kwango river. This territory is estimated to contain 1,065,200 sq. miles, with a population of 42,000,000. France was recognised as possessing a territory of 257,000 sq. miles, with a seaboard of 800 miles, and 5,200 miles of river navigation on the Gaboon, Ogowe, etc., which had been won for her by the exertions of Comte Savorgnan de Brazza, Dr. Ballay and others. Her new acquisition, besides the basins of these rivers, includes a short stretch of the north bank of the upper Congo. Portugal has 103 miles of the lower Congo south bank, and a strip of seaboard above Cabo Lombo, possessing altogether 351,500 sq. miles of area. But her new territory, and that of France, are included with the Free State in a zone consecrated to free trade and neutrality, which stretches right across the continent. (Consult Stanley's "The Congo," and the "Proceedings of the Royal Geographical Society" for April 1885.) The Conference secured the commercial freedom of the countries within this belt; agreed to suppress the slave trade within the Congo Free State, and declared it neutral territory; appointed an International Commission to secure freedom of navigation on the Congo, and also on the Niger; and provided that none of the signatory Powers should annex further territory in Africa without due reference to the others. The provisions of the Act are to be maintained by the forces of the signatory Powers, if necessary. The foundation of the International African Association is due to Leopold II., King of the Belgians, and its successful enterprise to the indefatigable and heroic energy of the American, Stanley. But its development into the Congo Free State, and the securing of the rich centre of the "Dark Continent" to free commerce, are certainly to be attributed to the far-sighted and enlightened policy of the German Chancellor, Prince Bismarck.

Berlin Congress. When the Turkish resistance to Russia collapsed in 1878, the Sultan was forced to sign a treaty, known as the Treaty of San Stefano. The armed protest made by England, however, coupled with the antagonistic diplomatic attitude of the other great Powers, compelled Russia to submit this instrument to Europe before enforcing it. Accordingly a congress was summoned to sit at Berlin; and to prevent any failure, Russia and England, who had armed forces almost facing one another, and were on that account more interested in a speedy settlement than any other western power, arrived at a prior understanding, which was embodied in the Schouvaloff-Salisbury memorandum of May 30th, 1878. The first meeting of the plenipotentiaries took place June 13th, the last July 13th, when the Treaty of Berlin was signed. England was represented by Lords Beaconsfield, Salisbury, and Odo Russell; France by M. Waddington; Germany by Prince Bismarck, the president, Von Bülow, and Prince Hohenlohe; Austria by Count Andrássy, Count Karolyi, and Baron Haymerle; Russia by Prince Gortschakoff, Count Schouvaloff, and Baron d'Oubril; Italy by Counts Corti and Launay; and Turkey by Caratheodori Pasha, Sadoullah Bey, and Mehemet Ali Pasha. Intense interest was manifested in the early

deliberations, but the feeling changed when the *Globe*, by the untoward disclosure of the full text of the Schouvaloff-Salisbury memorandum, proved, to the chagrin of many, that what was expected to have been the solemn and impartial deliberation of Europe was after all merely the formal registration of a secret agreement between England and Russia. By the Berlin Treaty Russia secured Batoum, Ardahan, and Kars, which implied political and military predominance in Armenia; she recovered Bessarabia and the mouth of the Danube, which she had lost at the close of the Crimean war; and she was appointed protector of the new independent principality of Bulgaria. Austria obtained Bosnia and Herzegovina. Servia became independent, and obtained Nish. Roumania had to cede Bessarabia to Russia, and received in return the Dobrudzha; she also became independent. Eastern Roumelia was formed into a partially autonomous state, ruled by a Christian Governor-General appointed by the Sultan. Montenegro was made independent, and received Antivari. Finally, Batoum was made a free port. Of the various states Austria, thanks to Germany, came best out of the negotiations, and not only received the largest share of territory, without having had to fight for it, but was enabled thereby to develop her political influence in the Balkan peninsula to its present preponderating position. Russia, who had mainly fought to win this, discovered before long that she was the chief loser, and during the last few years has apparently abandoned the hope of reaching Constantinople through the Balkan peninsula. The acquisition of Kars was no adequate set-off against this disappointment, and her discontent with the treaty, pretty plainly expressed on the morrow of the contest, has increased in intensity since, and has been the ruling motive in the breaking down of the Turcoman barrier and the encroachments on Afghanistan. The publication of Skobelev's private correspondence has revealed that the late Emperor, mortified by the Berlin Treaty, decided that it should be Russia's policy not to re-open the Eastern Question until she had secured a great place of arms (Herat) on the Afghan frontier.

Berlioz, Hector, b. at Grénoble, 1803, and went to Paris to study medicine. He abandoned his career, earned a pittance as a chorus singer, and finally pushed his way into the Conservatoire. At Rome he met Mendelssohn. On his return he married an actress, whose incompatibility caused a separation, but Berlioz honourably supported her until his death at Paris (1869). The magnificence and wonderful originality of his works are only now beginning to be appreciated. His special excellence, in which he surpasses every other musician, is in orchestral colouring. His work on Instrumentation (or orchestration) is the best which we possess. His greatest works are "Symphonic Fantastique, Harold" (written for Paganini), "Romeo and Juliet," "La Damnation de Faust," "L'Enfance du Christ," a Requiem, a Te Deum, and the operas "Beatrice and Benedict," "Benvenuto Cellini," and "Les Troyens." All these require vast orchestral and choral resources, and therefore are very rarely heard.

Bernhardt, Mademoiselle Rosine Sarah, b. in 1844, at Paris; the most distinguished French actress of her day. She is of Jewish descent. She entered the Paris Conservatoire at

the age of fourteen, where she studied tragedy and comedy. Joining the staff of the Théâtre Français, she made her *débüt* in Racine's "Iphigénie," and in Scribe's "Valérie," but was not very successful, and retired for a time from the stage. Her first grand success was as Marie de Neuberg, in Victor Hugo's play of "Ruy Blas." Becoming very popular by her representations in "Junie," in "Andromaque," and in "La Sphinx," she was replaced on the staff of the Théâtre Français. Since that time her popularity has been constantly increasing. In 1879 she visited London, in company with other members of the Comédie Française, and performed at the Gaiety Theatre, and (1886) Mlle. Bernhardt married, in 1882, M. Damala. She is also noted as an amateur artist and sculptor.

Bert, Paul, physiologist and French politician, b. at Auxerre (Yonne), October 17th, 1833. He studied at Paris. He graduated M.D. (1863), and D.Sc. (1866). In 1867 became Professor in the Faculty of Science at Bordeaux, and (1869) was appointed to the chair of the Faculty of Science in the University of Paris. He won (1867) the great biennial prize of 20,000 francs awarded by the Academy of Sciences. M. Bert was named Secretary-General of the Prefecture of the Yonne (1870), Prefect of the Department of the Nord (1871), a post which he resigned after the dismissal of M. Gambetta from the Ministry of War. Returned to the National Assembly (1874), he joined the Republican Union, and took an active part in the Assembly upon questions relative to public instruction. At the elections of February 1876 he was again elected to the National Assembly. In March 1876 he was named a member of the Committee of Historic Works, etc. In December 1878 he was elected president of the Biological Society. Was again returned to the Assembly October 1885, and was sent to Tonquin on diplomatic and administrative service (Feb. 1886). M. Bert is the writer of several important medical works.

"**Berwick, Mary.**" See NOMS DE PLUME.

Berwick, Richard Henry Noel-Hill, 7th Baron (creat. 1784), was b. 1847, and succeeded his uncle 1882.

Bessant, Mrs. See BRADLAUGH, CHARLES.

Bessarabia. A Russian province bordering on the Danube. It acquired political prominence at the close of the Crimean war by the surrender of a portion of it which Europe compelled Russia to make, in order to check her aggressive aims for dominating the mouth of that river. The portion withdrawn from Russian rule was added to Moldavia, which coalesced in time with the adjoining province of Wallachia, and formed the principality of Roumania. At the close of the last Turkish war (1877-78), Russia made it a point of honour to recover the territory she had lost, and in spite of the unwillingness of the Roumanians, the latter had to surrender it, receiving in return the wretched territory of the Dobrudscha, south of the Danube. As, but for the opportune assistance the Roumanians rendered the Russians after their defeat at Plevna, the latter would have been overwhelmed by the Turks and driven across the Danube, this act of Russia was vehemently censured at the time. Since the annexation, which brought Russia down to the Danube again, the Bessarabians have evinced no dissatisfaction at the change of masters.

Bessborough, Frederick George Brabazon Ponsonby, 6th Earl of (creat. 1739); Baron Ponsonby (1749), Baron Duncannon (1834), by which last two titles he sits in the House of Lords, was b. 1815, and succeeded his brother 1880. This ancient family derives its name from the lordship of Ponsonby in Cumberland, acquired at the Conquest. The first settler in Ireland was Sir John Ponsonby, a colonel of horse in the service of Cromwell.

Betghe, Herr. See CHINESE LOAN, NEW GREAT.

Beth Din. See TALMUD.

Bethell, Mr. George Richard, M.P., son of the late Mr. Richard Bethell, of Rise, Holderness. He is a captain in the Royal Navy. Returned in the Conservative interest as member for Holderness Division, East Riding (1885).

Beth Hamidrash. See JEWS.

Bethahan. See FAITH HEALING.

Bethawana. See BECHUANAS.

Betsileo. See MADAGASCAR.

Betsimisarak. See MADAGASCAR.

Beust, Count Frederick Ferdinand von, b. at Dresden, 1809. He studied at the Universities of Göttingen and Leipsic, and afterwards entered the Saxon Foreign Office. He was Secretary of Legation for Saxony at Berlin (1836-8), and at Paris (1838-41). He became *Chargé d'Affaires* at Munich (1841-6), and filled the same post at London till 1848, in which year he was appointed Ambassador at Berlin. He filled successively the posts of Minister for Foreign Affairs, Minister for Agriculture, and Minister of the Interior to the Saxon Government, from 1849 to 1863. His policy was of a reactionary character. Adverse to Prussia, he assisted Austria, and in 1866 sided with the latter in the Seven Days' War. After the war Count Beust became Foreign Minister to the Emperor of Austria, and later on Chancellor of the Empire (1867). In consequence of Count von Beust's influence over the Emperor of Austria, that monarch adopted the conciliatory policy towards Hungary which eventuated in the coronation of Francis Joseph at Pesth (June 7th, 1867). In 1870 he promised an alliance with France, but was unable to fulfil this promise. He was dismissed (Nov. 6th, 1871), and (1872) appointed ambassador at London and afterwards at Paris. Retired into private life (1882). Among his other orders, Count von Beust possesses the Grand Cross of the Legion of Honour, and the Cordon of the Order of the Black Eagle.

Boyschlag, Dr. See OLD CATHOLICS.

Bible, Old Division of. See REVISED BIBLE.

Bible, Paragraphs of. See REVISED BIBLE.

Bible Society, The British and Foreign. was established in 1803-4, its object being the propagation of the Scriptures. Up to 1884 over 100 million Bibles and portions of the Bible, in over 200 languages and dialects, had been issued under its auspices. The income of the Society increases annually, and in 1883-4 was over £230,000. The Society's new offices in Queen Victoria Street, E.C., were opened by the Prince of Wales on June 11th, 1866.

Biblical Archaeology. Although comparatively a new branch of antiquarian research, the study of Biblical archaeology—that is, the study of the monuments, inscriptions, manners and customs of the lands and the people mentioned in Holy Scripture—is daily increasing in importance and enlarging its area of

investigation. The study is emphatically the result of the labours of the explorer and the decipherer; for, as the former recovered the records of a once forgotten past from the grave of centuries, so the latter has forced from their long silent characters the secret they had so jealously preserved.—The commencement of the study of Biblical archaeology may safely be considered as contemporary with the decipherment of the Egyptian hieroglyphics by Young and Champollion, as this important achievement was followed almost immediately by the recovery of the record of the expedition of **Shishak** against India, which was found upon the walls of the temple of **Karnak**. Thus a synchronism was established between the Hebrew and Egyptian records, and from that time onward discoveries elucidating the history, manners and customs of the Jewish people continued to be made.—Amongst the most important gains derived from Egyptian sources must be considered the light thrown upon the geography of **Canaan** prior to the conquest of the land by **Joshua**, by inscriptions so full of topographical details as the itineraries of the wars of **Thothmes II.**, and the story of the journey of the Egyptian **Mohar**. These inscribed records form commentaries of the most valuable character upon that portion of the Book of **Joshua** so fitly styled by the late **Dean Stanley** the "**Doomsday Book of Canaan**." The explorations carried out by **M. Mariette** on the ruins of **Tanis**, the **Zoan** of the Bible, restored to us the portraits of the mysterious **Hyksos**, or shepherd kings, who ruled Egypt while **Joseph** and his brethren were in that country. The manners and customs of the Egyptian people are described by their writers and portrayed by their painters with such accuracy of detail that almost every incident in the life and surroundings of the Hebrew people in Egypt can be reproduced with an astonishingly vivid clearness and accuracy.—The discoveries made in Egypt were soon still further augmented by those from **Assyria** and **Chaldea**, **Phœnicia** and **Moab**; and the study of Biblical archaeology commenced to expand itself to larger areas of language and antiquities. The ancient empires of **Syria** and **Babylonia** were, both by national and historical circumstances, most closely associated with the Hebrew people; and therefore, when **Sir Henry Layard** astonished the world by his discoveries, it was felt that here was a field likely to yield the most important harvests. The result of the decipherment of the inscriptions has been the recovery of a series of important records bearing upon Jewish history, tradition, and social life. Of the historical discoveries the most significant are the record of **Ahab** as one of the Syrian allies who opposed **Shalmaneser II.** in the battle of **Karkar** (B.C. 853), and the payment (B.C. 841) of tribute by **Jehu** to the same king, after the defeat of **Hazaël**, king of Damascus. One of the consequences of the study of these records has been the establishment of a series of **synchronisms** between the Hebrew, Assyrian, and Babylonian records, as well as of a series of confirmations extending from B.C. 853 until the fall of the Jewish kingdom and the Babylonian captivity. So important were the results of Assyrian and Egyptian research, that in 1870 it was resolved by a number of scholars interested in these studies to found a **Society of Biblical Archaeology** (Secretary, W. Harry

Rylands, F.S.A., 9, Conduit Street, W.), of which the late **Dr. Samuel Birch** was the first president. The *Journal or Transactions* of this Society has ever since formed the chief medium by which current discoveries were communicated to the public.—The researches of the late **Mr. George Smith** showed that the information to be gathered from the Assyrian inscriptions was not confined to the historical section only; for by his discovery and translation of the *Chaldean account of the Deluge*, read before the Society of Biblical Archaeology in 1872, and supplemented a few years afterwards by the discovery of the *Creation Legends*, he demonstrated the very interesting fact that this important tradition of the Hebrew *Genesis* had its counterpart in the libraries of Chaldea.—Amongst the other achievements of research in this direction may be mentioned the very significant publication of the dates from the *Egipht* tablets, a series of important commercial documents, by **Mr. Boncawen**, which for ever placed the chronology of the later Babylonian empire upon a firm basis; as did the discovery, by **Mr. T. G. Pinches**, of fragments of canon inscriptions of the ancient kings of Chaldea, the chronology of the earlier empire.—The discovery of an important cylinder of **Cyrus**, recording the capture of **Babylon**, and of other tablets relating to the close of the *Chaldean empire*, afforded evidence of the utmost value, because occurring where it was most required, in connection with the later Jewish writings.—The discovery of the *Moabite Stone* (1866) showed that the *Semitic alphabet*, already familiar to us as being in use in *Phœnicia*, was in use also in *Moab*; and scholars anxiously await the discovery of an early Hebrew inscription in the same character.—One of the most picturesque of the questions clamouring for solution in connection with Biblical archaeology is that of the language of the inscriptions on the monuments from **Jerabius** and elsewhere, which are not only popularly, but in some scholarly quarters—it may be with a too great precipitateness and sanguineness of speculation—spoken of as *Hittite*. The language concealed within these characters awaits for its decipherment the discovery of a bilingual document, one of the languages of which should be known and certain. At present this *crux* of philologists is only known, beyond the recognition of a few names and symbols, to be a language which is at once hieroglyphic and phonetic. (Consult **Dr. Samuel Birch's** Inaugural Address on the "Progress of Biblical Archaeology," in vol. i. of the "Transactions of the Society of Biblical Archaeology"; **Rev. A. H. Sayce's** "Fresh Light from the Monuments"; **Professor Schröder's** "Cuneiform Inscriptions and the Old Testament"; "Transactions of the Society of Biblical Archaeology"; **Rev. Dr. W. Wright's** "Empire of the Hittites"; "Journal of the Victoria Institute," etc., etc.)

Biblical Archaeology, Journal of. See BIBLICAL ARCHAEOLOGY.

Biblical Archaeology, Society of. See BIBLICAL ARCHAEOLOGY.

Biblical Brotherhood, The. A new Russian sect, established in 1880 by four poor Jews of **Elizabethgrad**, tailor, corn-dealer, notary's clerk and schoolmaster, with the professed object of reconciling **Hebraism** and **Christianity**, combating the aversion of Oriental Jews to agricultural and hand labour, and generally divesting

the Jewish race of its essential and exclusive Jewish attributes. Their faith is mainly of a Rationalist character, admitting nothing "which science does not recognise as possible," accepting Revelation (which includes both Testaments, and the Talmud) in its spirit, but not literally in its traditions, and abolishing all ritual; it thus differs as widely as is possible from the grotesque faiths that have of late won so many proselytes among the Russian peasantry. Despite the keen hostility of their Jewish kinsfolk, and the anti-Semitic riots (see **Jews**), in which they were confounded with the Jews from whom they had separated, the new community have made rapid progress, particularly in New Russia and in the Ukraine. The Russian Government, which has at all times been ready to endorse any policy which seems likely to injuriously affect Judaism, has officially recognised the movement and afforded it its protection, to which cause its rapid development is doubtless in part due.

Bibliography. See **BOOK TRADE**.

Bibliography, A Classified. See **BOOK TRADE**.

"Bibliophile Jacob." See **NOMS DE PLUME**.

Bickersteth, Mr. Robert, M.P., son of the late Bishop of Ripon, was b. 1847. Educated at Eton and Oxford. Appointed one of Her Majesty's Inspectors of Factories (1873). Private secretary to Lord Kimberley (1880). Returned in the Liberal interest as member for North Shropshire (1885).

Bickford-Smith, Mr. William, F.R.A.S., F.R.H.S., M.P., of Trevarno, Helston, Cornwall, was b. 1827. Educated at Saltash and Plymouth. Is J.P. for Cornwall, and Vice-President of the Truro Wesleyan College, founded chiefly through his instrumentality. Elected (1885) in the Liberal interest as member for Cornwall, Truro Division.

"Biddenden Bread-and-Cheese," The. An annual distribution of bread-and-cheese is made every Easter Monday to the poor of Biddenden, in Kent, from the rental accruing from about twenty acres of land, said to have been left in the twelfth century for this purpose by two ladies, named Chulchurst, who were united bodily in a similar manner to that of the Siamese twins.

"Biddle, Jasper." See **NOMS DE PLUME**.

Biddulph, Mr. Michael, M.P., of Ledbury, Herefordshire, was b. 1834. Educated at Harrow. Is a member of the firm of Cocks, Biddulph & Co., bankers, a director of the Economic Life Assurance Company, and J.P. and Deputy Lieutenant for Herefordshire. Returned in the Liberal interest as member for Herefordshire (1865-85); South Herefordshire (1885).

Biela's Comet. See **ASTRONOMY**.

Biggar, Mr. Joseph Gillis, M.P., was b. 1828. Educated at the Belfast Academy. Chairman of the Belfast Water Commissioners (1869-72). Member of the Committee of Belfast Commercial Buildings. Returned as a Nationalist for Cavan County (1874-80-85); re-elected 1885.

"Biglow, Hosea." See **NOMS DE PLUME**.

Bigwood, Mr. James, M.P., was b. 1839. Educated at Chatham and St. John's Coll., Cambridge. Connected with the firm of Messrs. Champion and Co., mustard and vinegar manufacturers. Returned in the Conservative interest as member for East Finsbury (1885).

Billiard Championship.

Year.	Winner.	Second.
1870	J. Roberts, jun.	A. Bowles.
1870	J. Bennett	J. Roberts, jun.
1871	J. Roberts, jun.	J. Bennett.
1871	W. Cook	J. Roberts, jun.
1871	W. Cook	J. Bennett.
1872	W. Cook	J. Roberts, jun.
1874	W. Cook	J. Roberts, jun.
1875	J. Roberts, jun.	W. Cook.
1876	J. Roberts, jun.	W. Cook.
1877	J. Roberts, jun.	W. Cook.
1880	J. Bennett	W. Cook.
1881*	J. Bennett	T. Taylor.
1885†	J. Roberts, jun.	J. Bennett.

* Bennett resigned. † Roberts made the largest break of these matches—155.

"Billings, Josh." See **NOMS DE PLUME**.

Billingsgate Market, the principal fish-market of London, on the banks of the Thames near London Bridge. It was the original port of London, but has been frequently improved, and was rebuilt in 1852 and 1874-76.

Bill of Sale. The statute law relating to bills of sale in England is contained in the Acts of 1878 and 1882. A bill of sale upon goods or chattels corresponds to a mortgage of real estate; and the above Acts are chiefly directed to prevent the fraudulent granting of bills of sale. Every bill of sale given by way of security for the payment of money shall be void unless made in accordance with the form in the schedule of the Act of 1882. It must be duly attested by one or more credible witnesses not being a party or parties thereto. It must be registered within seven days after making, and the registration must be renewed once every five years. When first registered, a copy of the bill, together with an affidavit of the time of such bill being given, of its due attestation and of the residence and occupation of the person giving the same, and of every attesting witness, must be presented to the registrar and filed by him. If the bill of sale be given subject to any defeasance, condition, or declaration of trust, such defeasance, condition, or declaration must appear, if not in the body of the bill at least on the same paper, and must be set forth in the copy filed. A transfer or assignment of a registered bill of sale need not be registered. Bills of sale comprising, in whole or in part, the same chattels, take priority in order of registration. Delays, omissions, or mistakes in the registration of bills of sale may be rectified by the order of any judge of the High Court. A bill of sale executed within seven days after the execution of an unregistered bill of sale will be held void, in so far as it affects the same chattels, unless it is proved not to have been executed for the purpose of evading the law. Any bill of sale not complying with the conditions of attestation and registration, is void as against the giver, trustee in bankruptcy, etc. A bill of sale given in consideration of a sum less than £30 is void. A bill of sale is void except as against the grantor with respect to any personal chattel acquired by him after its execution. But this provision does not apply to growing crops or fixtures or machinery subsequently acquired in substitution for fixtures or machinery specified in the bill. Chattels assigned under

a bill of sale are not liable to be seized by the grantee unless (a) the grantor make default in paying the money thereby secured, or in fulfilling any condition necessary to the security; (b) the grantor become a bankrupt, or allow the goods comprised in the bill to be distrained for rent, rates or taxes; (c) the grantor fraudulently remove, or suffer to be removed, from his premises the goods comprised in the bill; (d) the grantor refuse, without reasonable excuse, to produce to the grantee his last receipts for rent, rates, and taxes; (e) execution has been levied on the grantor's goods under any judgment.

Bill, Parliamentary. A Parliamentary bill is either (1) public or (2) private. (1) If a public bill be commenced in the House of Commons, the first step is to move, after giving notice, that leave be given to bring in a bill. If leave be given, it is ordered that the bill be prepared by the mover and seconder. It is read a first time and then ordered to be printed; then read a second time (and this is the occasion for discussing its principle); after which it is committee'd and its details debated by a committee of the whole house or else by a committee selected from the house. It is then reported with the amendments of committee; every clause and amendment is then put to the question; it is ordered to be printed as amended, and is then read a third time. It is then carried by a member to the Lords and delivered to the Lord Chancellor. There it goes through the same stages, and if amended comes back to the Commons. If the houses cannot agree upon the amendments, the bill drops; but if they are accepted, then the bill goes back to the Lords with an announcement to that effect. If a public bill be commenced in the House of Lords, the stages are very similar, only that a peer can introduce a bill without first asking leave. (2) A private bill must be prefaced by a petition setting forth the end desired, and presented by a member of the house. This petition is in the House of Commons referred to a committee, and in the House of Lords to two judges to report upon. Leave is then given to bring in the bill, which goes through stages resembling those of a public bill. Public and private bills alike require the royal consent, given either in person or by commission, in order to become statutes. A bill may, at least in theory, be lost at any reading in either house.

Bimetallicism is a term currently employed for denoting a Double Standard of Value. The standard of a country is said to be bimetallic when two metals can be used indiscriminately as legal tender for the payment of debts up to any amount, the ratio of value between these two metals being arbitrarily fixed by law. Thus, in France the ratio of value between gold and silver is fixed at 1 to 15½, in weight; that is to say, a debtor may offer his creditor either one ounce or one pound, as the case may be, in gold, or 15½ ounces or 15½ pounds in silver. The essence of bimetallicism is, firstly, that the ratio of value between the two metals selected as standards is fixed by law; secondly, that the mints of the country are open for the coinage of both metals to any extent required by the public; and thirdly, that either metal can be used by a debtor in discharge of liabilities, however great. As a matter of fact, the only two metals that have been selected for the purpose of establishing a double standard have been gold and silver, and

the following remarks, consequently, apply solely to those metals. In England, gold and silver circulate together, and are interchangeable at a fixed rate; but silver is legal tender up to only forty shillings, and the coinage of the metal is limited by the mint. Gold, on the other hand, can be coined to any extent, and can be offered in payment for all debts. England, therefore, is a gold-monometallic country, silver being used solely as token currency. In India, and in Mexico, silver alone is entitled to unlimited coinage; gold in those countries is merely merchandise. In China, silver is not coined, but it has monetary power, and circulates by weight in ingots. Silver-monometallism, therefore, prevails in the three last-named countries. In France, in Germany, and in the United States, gold is at the present moment entitled to unlimited coinage; silver is wholly treated as merchandise. There is, however, in each of these three countries, an enormous mass of silver coins the legal tender of which is not limited to a certain amount. This may be styled partial bimetallicism. Each of these countries had originally adopted either silver-monometallism or bimetallicism, but circumstances had compelled them to cease the free coinage of silver; hence their peculiar position of possessing neither a purely single nor a double standard. In 1816, after the close of the great war, England resumed specie payments, and adopted as her standard gold alone. Having merely to coin gold, without having a silver currency to sell as bullion, the operation was easily realised, without loss or inconvenience, within the course of a few years. The position, however, was very different with Germany. When she determined, in 1871, to substitute gold-monometallism for her old silver-monometallism, the florins and thalers had to be melted, exported as bullion, and exchanged for gold. To effect this, Germany looked to the great bimetallic country, France, and to the other members of the bimetallic Latin Monetary Union—namely, Italy, Belgium, Switzerland, and Greece. The idea was to send silver bullion to France, and have it coined into five-franc pieces, with which gold could be purchased, either by exchanging the five-franc pieces for napoleons, or by buying bills on London, payable at maturity in gold. The countries of the Latin Union, however, refused to be so accommodating, foreseeing that they would be flooded with silver, whilst losing all their gold. In 1873 the Union slackened the coinage of silver; it further limited it in 1874, and entirely prohibited it in 1879. Silver, accordingly, fell heavily in value, the market price touching in 1876 46s. d., compared with an average of about 60s. per ounce in former years. German sales proceeded for a while, but the losses sustained by the Government became so serious that they were stopped long before the great mass of the silver called in by the Government had been exchanged for gold. It was finally decided not to meddle with the thalers still in circulation, and these are, up to the present day, legal tender like gold. In France, and in the other countries belonging to the Latin Union, silver is no longer coined, except in such small amounts as the Governments may deem necessary to make up for wear and tear, etc. But all the silver in these states is good legal tender up to any amount, so that bimetallicism is still in force in those countries

as regards the silver already in circulation. In the United States the position is somewhat different. There the coinage of silver was recommenced in 1878, under the **Bland Act**, but the amount to be coined annually was restricted by legislation to not less than \$2,000,000, nor more than \$4,000,000 per month. The purchases of silver since 1878 have continued without interruption at the rate of about \$2,000,000 per month, and by the end of December 1885 the total coinage amounted to \$215,000,000. That the depreciated Bland dollars (for they are only worth some 85 per cent. of their nominal value) have not driven gold out of circulation, is due entirely to the good sense of the banks, who have steadfastly refused to accept silver as legal tender. The mass of silver accumulated at the United States treasury, however, has now become so alarmingly large that the Bland Act is seriously threatened. Its abolition is strongly recommended by President Cleveland. Should silver cease to be coined, the position in the United States will exactly resemble that in Germany and France. All three countries will be gold-monometallic, whilst possessing a large amount of silver coinage having the attributes of legal tender. Unrestricted bimetalism is no longer in force in any country. **Bimetallists** contend that, by fixing a legal ratio between the value of gold and silver, and using both metals as legal tender, fluctuations in the relative value of the metals are avoided, whilst the prices of commodities are rendered steadier. They point out that both silver and gold must necessarily be used by the world as standards of value. And in this, no doubt, they are right. Of the world's total estimated population of 1,400,000,000 only 400,000,000 employ gold as a measure of value, all the rest using silver. An attempt, therefore, to demonetise silver may be regarded as beyond the region of practical statesmanship. The question remains whether it would not be better for certain countries to use gold alone as their standard, and for others to employ silver alone, rather than have a universal double standard composed of the two metals. We need not dwell on the difficulties or impossibility of getting all nations to adopt bimetalism, but we may point out that the only direct inducement for carrying out such an arrangement would be that a bimetallic standard would tend to keep prices steadier than a monometallic standard. Unfortunately there is no evidence to support this assertion. Supposing bimetalism were universally adopted, and supposing also that silver could be obtained as cheaply as, say, copper, would anybody contend that gold would continue to be produced? The miner would necessarily turn to producing the cheaper metal, and the mints would be flooded with that metal, to the total exclusion of the dearer metal. The tendency would therefore be for one metal to supplant the other; and as, according to the hypothesis, the cheaper metal is found in profusion, prices of commodities measured in that metal would necessarily rise. The same process, and the same results, would of course ensue in the case of monometallicism, should the annual supply of the metal used as a standard be augmented to any great extent. But there would be this difference—namely, that prices would, in monometallicism, be dependent on the fluctuations in the supply of one metal alone; whereas, in the case of bimetalism, their liability to fluctuations would

be twice as great, inasmuch as the value of the currency would be ruled by the production of the cheaper metal alone. In other words, bimetalism would suffer from any alteration in the supply of *either* gold or silver, whereas, in the case of monometallicism, the risk of fluctuations is confined to one metal. The fact of employing two metals does not in any way steady the relation between the standard of value and other commodities. It is not like the investor putting his money into several stocks in order to get a steadier average return. In bimetalism there is no average at all. One or the other metal must be dominant, and in reality would rule all prices. If one metal were to rise whilst the other fell the position would be rendered worse, not better. No doubt the great mass of silver and gold already in circulation would prevent any violent fluctuations, but the tendency must necessarily be as we have described it. Such being the case, it is impossible to see what substantial inducement is held out to the world to adopt a double standard. After these remarks, little need be said regarding bimetalism adopted by only a few states in the world. Such bimetalism has been tried and found wanting in the case of the Latin Union. It is the boast of bimetallists to point to the steadiness in the price of silver prior to the closing of the French mint in 1873. We may even concede that the price of silver did not vary, and closely adhered to the legal ratio of 15½ to 1. For it is justly pointed out that, although the price of silver in the London market between 1877 and 1879 fluctuated between 58½d. and 62½d., or about 7 per cent., its fluctuation was nominal rather than actual, in view of the French mint's charges, the delay of that mint in coining, which caused loss of interest, and the abraded condition of the French silver coins. Partial bimetalism, it is true, withstood such shocks as were produced by the discovery of gold in California and Australia, and the strong demand for silver for India on the occasion of the cotton famine, and no doubt a certain amount of good was derived from its operation by other countries. But it utterly failed, as we have seen, when Germany resolved to discard silver. For political and other reasons, France did not choose to allow her rival to take away all her gold and leave only silver behind. What has occurred once, may occur again. Any international bimetallic agreement must necessarily be limited in its duration; and who can say that arrangements now made will be continued by all the parties to the contract after the lapse of twenty or thirty years? One or more countries may break away, and silver may be subjected to another period of lamentable depreciation such as we have experienced during the last ten years. What is so seriously affecting the silver market now is the probability of the American Bland Act being repealed. In short, it is Government interference, and not natural influences, that have caused the sudden fall in the metal. When all such impediments are removed, the probability is that the price of silver, even if it should not improve, will remain quite as steady as it did, for years, under the operation of bimetallic protection. Gradual changes there will be, as in the case of all commodities, but a gradual variation in the intrinsic value of a currency neither hampers trade nor hurts the individual. What trade abhors most is sudden shocks.

"Binet, Satané." See NOMS DE PLUME.

Biological Association, The Marine. See BIOLOGICAL LABORATORIES (MARINE).

Biology (from *bios* = life, and *logos* = a word). Biology has two meanings. Strictly it is, as its derivation implies, the science that deals with living bodies. In this sense the word includes the sum of all facts and generalisations as to plants and animals. But in the schools and universities, and in the books, biology, usually prefixed by the word "**general**," has come to mean the study of certain typical forms of living things; the study of certain special plants and animals that are characteristic examples (1) of special groups of the two kingdoms of living beings, (2) of the general lines along which the evolution of living things has gone. Thus, at the examinations of the Science and Art Department, South Kensington, the first stage requirements include *bacterium*, *torula*, *protococcus*, *mucor*, *penicillium*, *chara*, *fern*, *flowering plant*, *amœba*, *infusoria*, *hydra*, *sea-anemone*, *mussel*, *lobster*, *frog*. (The italicised names are those of plant organisms; the rest are those of animal organisms.) The second and honours stages in general biology are divided into animal and vegetable morphology and physiology. At **London University**, in the intermediate examination for the degree in science, general biology is a subject, including, in addition to the types given above, earthworm and snail. But in the honours for this examination, and in the final examination for the B.Sc. degree, the botany and zoology are separated. Taking the word biology in its wider and truer sense, certain divisions of the subject present themselves. Even in its more restricted sense the same divisions occur, although they now have reference to certain types only, and not to living things generally. These divisions will be best understood by aid of the following table:—

BIOLOGY.	{	VEGETABLE = BOTANY	{ Morphology	{ Histology.
			{ Physiology	{ Anatomy.
			{ Classification	
	{	ANIMAL = ZOOLOGY	{ Morphology	{ Histology.
			{ Physiology	{ Anatomy.
			{ Classification	

Botany (*q.v.*) (from *botanē* = grass), is the study of plant living things. **Zoology** (from *zōon* = animal, and *logos*), is the study of animal living things. The name zoology (*q.v.*) is often, and unfortunately, restricted to one division only of itself—viz., classification. Each of these two main branches of biological science has three divisions. **Morphology** (from *morphē* = form) is the study of structure. **Histology** (from *histos* = a web) is minute anatomy, or the study of the tissues microscopically and by chemical and physical reagents. **Anatomy** (from *anatemno* = I cut up) is the study of the organs that tissues build up. **Physiology** (from *phusis* = nature) is the study of the functions of organs. Classification deals with the grouping of living things into the artificial series of kingdoms, sub-kingdoms, classes, orders, genera, species, etc. The study of biology, in its narrow sense, we have seen entering into university curricula and the syllabus of examinations. In its wider sense biology is engaging the attention of numbers of men and women, con-

stantly growing in volume and in knowledge. Students of science are recognising that the botanist and zoologist, pure and simple, are of secondary importance compared with the biologist, who studies all forms of living things. The chief discoveries of recent times may none the less be treated of better under the heads of Botany and Zoology than here. In this place it is preferable to mention one or two of the chief points bearing upon living things generally that have been yielded recently. The two main directions in which biological work has led human thought of late point to these conclusions: first, that the distinctions between plants and animals are by no means so many or so clear as was formerly supposed; secondly, that the phenomena of living things are to be interpreted in terms of physics, chemistry, and even of mathematics. As to the distinctive marks of the vegetable and animal kingdoms, these have of late become reduced in numbers and of less certainty than heretofore. Movement and sensation, as characteristic of animals, have long been abandoned. The presence of nitrogen in the cell-walls of animals and its absence in the cell-walls of plants still hold better than most of their fellows, although the essential constituent of plant cell-walls—cellulose (*q.v.*)—is found in animal bodies. The primary cell-content of plant and animal structures, protoplasm (*q.v.*), is identical in the two kingdoms. The nature of the food no longer separates satisfactorily animals from vegetables. Generally the latter feed on inorganic or mineral substances, the former largely on organic. But much of the food of animals is mineral, and there are many carnivorous plants. Chlorophyll, the green colouring-matter of vegetables, is found in the hydra, and even in the wing-cases of beetles. It can certainly be built up by and retained within animal organisations. Glycogen also, a normal constituent of the liver in the animal kingdom generally, has been found in certain of the fungi. Not only is there difficulty in giving distinctive marks to the two great divisions of the living; there is almost equal difficulty in marking off the lowest living organisms, by any definition, from the non-living. These difficulties of definition are the natural result of our advancing knowledge, and of the phenomena of evolution. On the second great point, biological phenomena are becoming daily more recognisable as physical and chemical in their nature. Their occurrence and recurrence are more and more reducible to mechanical laws. Many of the functions of living things are already expressible in terms of mathematics, and probably in time all will be thus expressible. If ever the enigma of life is solved, the solution will probably come by way of chemistry and physics. The albuminous substances that enter into the composition of all living bodies are many, and isomerism is very marked among them. In the artificial synthesis of these albuminous bodies lies our hope. The best books for the student of biology are the leading text-books on botany and zoology (*q.v.*). In addition to these such works as Huxley and Martin's "Biology," Aveling's "General Biology," G. B. Howe's "Atlas of Elementary Biology," and Sedgwick's "Elementary Text-Book of Zoology," will be of use. These are all practical works, and the study of biology must be practical. For larger

generalisations Herbert Spencer's "Principles of Biology" may be consulted.

Birch, Dr. Samuel, D.C.L., LL.D., F.S.A., Keeper of the Egyptian and Oriental Antiquities in the British Museum, grandson of Mr. Samuel Birch, Lord Mayor of London, was b. 1813. Entered the public service (1834); British Museum, Assistant Keeper of Antiquities (1836). Visited Italy on a mission to investigate and report on Egyptian collection at Leghorn (1846); sent to Rome to examine the Campana collection (1856); Keeper of the Oriental, British, and Mediæval section of the Museum (1861), and subsequently the Egyptian and Assyrian section. Hon. LL.D. St. Andrews (1862); LL.D. Camb. (1875); Rede Lecturer (1876); D.C.L. Oxford (1876); Hon. Fellow Queen's Coll. (1875), besides many foreign academical distinctions. Dr. Birch was a most skilled archaeologist, and will be especially remembered for his capacity and skill in Egyptology, both with regard to the language and antiquities. He was a voluminous writer, and amongst his numerous works may be mentioned his "Egyptian Grammar and Dictionary," and "Records of the Past," besides many contributions in the Transactions of the learned societies, the *Times*, and *Athenæum*, etc. Dr. Birch died December 29th, 1885.

Birds, Migration of. The passage of birds from one country to another, or from one part of a district to another. Recent and systematic investigation, as instituted by a committee appointed by the British Association for obtaining observations on the migration of birds at light-houses and lightvessels, as well as specially isolated stations, has added greatly to our knowledge of the subject. In the six reports published since 1879 by the committee, an immense number of facts have been brought together having reference to the various complicated phenomena attending the seasonal movements of birds; showing that with very few exceptions there is scarcely a bird of either the palæarctic or nearctic regions that is not, to a greater or less degree, migratory in some part or other of its range. In the British Isles, with rare exceptions, all birds, even such as are generally considered habitual residents—the young invariably, the old intermittingly—leave in the autumn, their place being taken by others, not always necessarily of the same species, coming from more northern latitudes, or from districts of eastern Europe, where on the approach of winter the conditions of locality and food supply are less favourable to existence. These immigrants on the approach of spring leave our shores, travelling back to the Continent on the same lines, but in the reverse direction, as those traversed in the autumn. At the same time also our English nesting birds, which have wintered on the Continent or in more southern latitudes, return to their summer quarters. Mr. Seebohm has remarked, "We may lay it down as a law, to which there is probably no exception, that every bird breeds in the coldest regions of its migrations. No bird migrates to the tropics to breed, because there is no hotter region for it to migrate from." On the east coast of the British Isles the autumn migration from the Continent commences in the last fortnight in July, and is continued with slight intermissions to the end of December, and not unfrequently into the succeeding year. There are "throbs" and "rushes," lasting for days and even weeks,

during which migrants arrive on our coast continuously night and day, and apparently perfectly independent of wind and weather. The general direction of flight is from east to west, or south-east to north-west, the flights often extending over the whole of the east coast or Great Britain. This broad wave of migration is shown to be denser, or more persistent, on certain special lines or highways, as the Pentland Firth, Firth of Forth, Farn Islands, Flamborough Head, the Spurn, and the north and north-east coasts of Norfolk. As a rule, the young of the year flock together and migrate alone, and some weeks in advance of the old birds. In the spring the males often migrate in advance of the females. Migrants cross the North Sea at all hours of the day and night, and in all winds and weathers; they seldom fly dead to windward unless with light breezes, and strong head-winds are unfavourable to their passage,—the line of flight being usually within three or four points of the wind. If the wind changes during passage, birds have been observed from the lightvessels to change the direction of flight to suit the wind. The state of the weather has much to do with the height at which birds travel: often with north and east winds they fly high, and with the wind in opposite quarters low. On clear nights they also travel high; but in fog, rain, or snow, low, not many feet above the waves. It is invariably found, on thick, dark nights, with fog, rain, or snow, that they appear to lose their way, great numbers striking the lanterns of light-houses or lightvessels; at such times also they will wheel for hours round the light, resuming their course on the clearing of the sky, or when the first streak of day becomes visible on the horizon. The period of migration of any species varies greatly: sometimes it is over in four or five weeks, in others extended to months, and even half a year. Quite independent of these normal or ordinary movements of birds on migration, there are local movements due to sudden changes of temperature, or in search of fresh feeding-grounds. The rate at which birds travel during their migration has been variously stated; from recent data we may infer the pace of the woodcock is about fifty-two miles an hour, and capable of being sustained from ten to twelve hours. Of the enormous immigration which strikes the east coast in the autumn, either to winter in these islands or merely on passage across them, a small proportion only appear to return by the same route; the points at which birds in the spring have actually been seen to leave the land are situated in Forfarshire, on its south-east and east coast, and between that point and the Bel rock, in Scotland; and on the English coast a Flamborough, the Spurn, and the Norfolk coast. See annual "Report on Migration" (Simpkin & Co.)

Birkbeck, Mr. Edward, M.P., of Horstead Hall, Norwich, was b. 1838. Is J.P. and Deputy Lieutenant for Norfolk. Originator and Chairman of the International Fisheries Exhibition, and Chairman of the Royal National Lifeboat Institution. Returned in the Conservative interest as member for East Norfolk (1885).

Birkbeck Institution, The, was founded by Dr. Birkbeck in 1823, as a mechanics literary and scientific institute. The foundation stone of the present building, Bream's Buildings, W.C., was laid by the Duke of

Albany in 1883, and the building formally opened by Prof. Tyndall, on October 22nd, 1884.

Birmingham Kyrie Society. See WINDOW GARDENING.

Birmingham School of Politics. "Government by the people and for the people" is the motto which probably best represents the belief of what may be called the "Birmingham School" of politics. Birmingham is distinguished for the importance of its Nonconformist bodies, both in numbers and intellectual influence. These bodies have numbered among their ministers George Dawson, Charles Vince, and Dr. Dale, all of whom took an active part in the political life of the town, and doubtless helped to stimulate it. Long before their time the Birmingham Political Union, led by Thomas Attwood, helped to pass the Reform Bill of 1832. Ten years later, the Complete Suffrage Union, under the guidance of Joseph Sturge and others, promoted the reforms that have become law in 1885. These movements were largely supported by non-electors; but ever since the extension of the franchise in 1867 the ascendancy of the Liberal party in Birmingham has been conspicuous. At present all the seven members for the borough are Radicals, as well as 60 out of the 64 members of the Town Council. The organisation of a very complete representation of the party by an elective body called "the 2,000" (the prosperity of which is greatly due to the tact and ability of the president, Mr. Schnadhorst), has been so successful that it has been copied all over the country, even by those who stigmatise it as the "Caucus," and decry its "tyranny." Mr. John Bright has represented Birmingham ever since 1857, and his views in favour of reform, free trade, and non-intervention in the affairs of other nations, are very heartily supported by his constituents. The National Education League, founded and largely supported in Birmingham, of which Mr. George Dixon was the leading spirit, developed the agitation which led to the passing of Mr. Forster's Education Act of 1870, and the subsequent wide extension of primary education. Mr. Jesse Collings' Allotments Extension Act, 1882, which directs the trustees of Charity Land to offer it in allotments to the labourers, has been chiefly carried into effect by the aid of the Allotments Extension Association which is carried on in Birmingham. Mr. Chamberlain and Mr. Collings, at present the leading representatives of the Birmingham Political School, are now endeavouring to secure land for the labourers by investing representative bodies with compulsory powers for the purchase of property for that purpose.

Bishop, A. is at the head of the clergy within his diocese, and is subject only to his archbishop. He is elected (a pure formality) by his dean and chapter on the nomination of the Crown. His chief duties consist in ordaining priests and deacons, licensing curates, consecrating churches, and visiting his clergy and laity. He is also an ecclesiastical judge, and sits in the House of Lords (with the following exceptions—viz., the Bishops of Ely, Exeter, Lincoln, Manchester, Ripon, Salisbury). There are thirty English bishops. Style: "The Right Rev. the Lord Bishop of —"; addressed as "My Lord."

Bishop of Durham on Revised Version. See REVISED BIBLE, THE.

Bishops, List of English. See CATHEDRALS.

Bishops, Terms relating to. **Bishopping**, a term sometimes applied to Confirmation. **Bishop's Charge**, the instructions of a bishop to the clergy and laity at his Visitation (*v. infra*). **Bishop's Court** is held in the cathedral of each diocese, and dispenses the canon law. The **Bishop's Chancellor** is the judge. In large dioceses Consistory Courts are held by the Bishop's commissaries. **Bishop's Pastoral**, a letter addressed by a bishop to the clergy and laity of his diocese on some special occasion. **Bishop's Ring**, worn by all bishops, signifies his spiritual marriage to his see. **Bishop's Visitation**, the summons to meet their bishop issued to his clergy and laity. (The canonical age for the consecration of a bishop is thirty years.)

Bishops, Various Kinds of. **Bishop Coadjutor**, one appointed to assist another bishop in his diocese. **Bishop, Colonial**, may perform all episcopal functions in the United Kingdom, but has no jurisdiction. **Bishop Designate**, a priest nominated to a vacant bishopric. **Bishop Elect**, a Bishop Designate (*v. supra*) who has been also elected to his bishopric by his dean and chapter, but who is not yet installed. **Bishop in Partibus**, a titular bishop (*v. infra*), whose diocese or title is in a country peopled by heathens or heretics. **Bishop, Suffragan**, a priest appointed and consecrated as bishop to assist a metropolitan in his work. The provincial bishops, in their relation to the archbishop, are sometimes, but erroneously, called Suffragans. **Bishop Titular**, a priest consecrated as bishop, but without a bishop's jurisdiction.

Bismarck, Count Herbert von. See GERMAN POLITICAL PARTIES.

Bismarck-Schönhausen, Otto Eduard Leopold, Prince; created Count September 16th, 1865, and Prince (Fürst) von Bismarck, March 1871, the most powerful statesman of Europe in modern times; b. of an old noble family of the "Mark" (Brandenburg) at Schönhausen, April 1st, 1815. He led a somewhat tempestuous youth, in the course of which he studied and fought duels at the universities of Göttingen and Greifswald, spent some time in the army, and subsequently settled down as a country gentleman, managing the family estates and discharging the office of inspector of dykes. Brought up in the political faith of the Junkers, or Prussian Tory squirearchy, he became (1846) a member of the Provincial Diet of Saxony, and of the Prussian Diet, in which he first attracted attention by his fiery speeches in defence of the old monarchical party. During the revolutionary period of 1848 the services he rendered in the public debates to the Conservative cause so impressed the Prussian Ministry that he suddenly found a diplomatic career opened to him. The representation of Prussia in the Diet of the old German Bund at Frankfurt falling vacant, the Premier introduced Herr von Bismarck to the king, who, not without misgiving, appointed him to that important post. Here he remained for several years, discharging the arduous duties of his office with an ability which won for him the admiration of the Prussian court. The remarkable series of private despatches which he addressed to the Prussian Premier, and which have recently been given to the world, are models of diplomatic skill and statecraft. Austria was then all-powerful in the German Bund; and, supported by nearly all the other German states, had systematically prevented Prussia from exercising that influ-

ence in the counsels of the Confederation to which, from her position as by far the greatest of the purely German states, she was justly entitled. From the time of Bismarck's appearance, however, the voice of Prussia began to have increasing weight. The successful audacity with which he checked Austrian intrigue at Frankfort was the source of constant irritation at Vienna, and naturally tended to produce some estrangement between the Austrian and Prussian courts. Herr von Bismarck was sent as ambassador to St. Petersburg (1859-62). In May 1862 he was promoted to the then most difficult and important post in the diplomatic service—that of Prussian ambassador at Paris, where Napoleon III. was then in the plenitude of his power. Five months later he was summoned to Berlin, and made First Minister of the Prussian Crown. The first ten years after Herr von Bismarck assumed power are amongst the most remarkable in modern European history. Within that brief period he had humbled the Austrian empire, destroyed the French empire, and created the new German empire. He remodelled the map of Europe, dismembering Denmark and France. He enlarged the frontiers of Prussia by the annexation of various provinces, including the dominions of three dethroned German princes; and succeeded in placing Germany, which had previously been the weakest and least respected of the great powers, at the head of all the states of Europe. His first task as Minister President was, however, one from which a statesman of less resolution and of less firm belief in the rights of the Crown, might well have recoiled. The Chamber of Deputies had refused to pass the military budget, as it demanded increased grants, which were required to carry out the reorganisation of the army in accordance with the ideas of the King. The House uniformly refused these supplies, and for several sessions heated debates and violent scenes, in which the Minister President and the Liberal leaders were the principal antagonists, were of constant occurrence. In spite of the rejection of the budget by the Chamber the Government spent the money, and the House threatened Von Bismarck with impeachment for violating the Constitution. In the midst of this quarrel a Congress of all the Princes of Germany was invited to meet at Frankfort to reorganise the German Bund, but the King of Prussia, by advice of his minister, refused to appear; and the project, although discussed and approved by five-sixths of the German sovereigns, came to nothing. The German Bund having, at Herr von Bismarck's instigation, resolved to invade the Elbe Duchies in support of the claims of the Duke of Augustenburg, Austria, Prussia and Saxony, were intrusted with the execution of the task; and a war broke out in 1864 with Denmark, resulting in the loss to her of the Duchies of Schleswig-Holstein and Lauenburg. Instead of giving them up to the Duke, Von Bismarck, now created Count, determined, if possible, to annex them to Prussia. The Austrian and Saxon troops were recalled, and the quarrel eventually led (in 1866) to a war between Prussia and Austria, who was joined by Bavaria, Hanover, Hesse Cassel, Hesse Darmstadt, and Nassau. The arms of Prussia were victorious: Austria suffered a crushing defeat at Sadowa (Königgrätz), in Bohemia. Hanover and the South German states were likewise vanquished; and the war, which was

over in seven weeks, led to the treaty of Nikolsburg, by which Austria was permanently excluded from the German Bund, and Hanover, Nassau, Hesse-Cassel, and Frankfort, as well as Schleswig-Holstein and Lauenburg, were annexed to Prussia; and the North German Confederation, with Prussia at its head, was established in place of the old Bund, while with the South German states an offensive and defensive alliance was concluded, giving the King of Prussia supreme command of all their troops in time of war. Of the North German Bund Count von Bismarck was created Chancellor, and President of the Federal Council. In addition to these successes, in consideration of which the Prussian House of Deputies passed a bill of indemnity, forgiving his former breaches of the Constitution, Count von Bismarck obtained great popularity for creating a representative branch of the new Federal Government, on the basis of manhood suffrage. The Diet, which first assembled in 1867, consisted of delegates representing a nation of 29,000,000 Germans. Napoleon III., jealous of the growing power of Prussia, attempted to obtain some compensation for France by the annexation of the Grand Duchy of Luxemburg, which Holland had consented to cede to him. But in this scheme the French Emperor was thwarted, chiefly by the energetic attitude of Count von Bismarck; and in the end the Duchy was declared neutral territory, and the fortifications of the capital were demolished. In 1868 Count von Bismarck withdrew for some months from active public life, but he was in power again before the end of the year. Already for some time the biography of Count von Bismarck had practically been the history of his country, and great as were the events through which he had conducted Germany, he was destined to lead her shortly through greater events still: notably by the defeat of the French in 1870, the dispute growing out of the offer of the crown of Spain to Prince Leopold of Hohenzollern. The King of Prussia, as the head of the family, had consented to his acceptance of the honour, afterwards revoked. After a campaign consisting of an unbroken series of victories, largely due to the strategic genius of Count von Moltke (*q.v.*), King William was able, through his Chancellor, to dictate terms of peace to his helpless assailant. Of the events in Prince Bismarck's life subsequent to the Franco-German war, it may be mentioned that he presided at the Congress of Berlin (1878), the Berlin Conference (1880), and the Congo or Colonial Conference (1884). In his domestic legislation Prince Bismarck has been far less fortunate than in his diplomatic negotiations. In his economical policy, after beginning as a Free Trader he has become a Protectionist. He first largely reduced the customs tariff, and ten years later imposed heavier duties than ever. While he thus alienated the Liberals, his May Laws, interfering to an unwise extent with the religious liberty of the Catholic priesthood, led to a long and bitter struggle with the Roman Church, and made all its adherents his bitter enemies. Equally unfortunate was his policy with regard to the Social Democrats, his Draconic measures against whom have produced the profoundest discontent among the working classes of the large cities. The measures he has sanctioned against the Polish settlers in the eastern provinces of Prussia, formerly belonging to Poland, savour of

harshness. In the course of his career Prince Bismarck has given utterance to expressions which have since become familiar in every civilised tongue. In the heat of the controversy with the Catholics he once said, "We shall never go to Canossa;" but, like the Emperor Henry IV. to Pope Hildebrand (Gregory VII., the Great), he has since found it expedient to send an ambassador to the Vatican (see *Times*, February 16th, 1886), and to repeal the harshest portion of the May Laws. He had previously (Dec. 31st, 1885) received the decoration of the Order of Christ from the Pope. Prince Bismarck is often called the man of "iron and blood," because in one of the first speeches he delivered as Minister President (in 1862) he said that "it was not by speeches and majority votes that the great questions of the time would be settled, but by *iron and blood*." The Danish, the Austro-German and the Franco-German wars form a significant commentary on this expression. Other phrases attributed to him are that "Might goes before Right," the definition of a journalist as "a man who has failed in his profession in life," and many others. Of the extensive literature on Prince Bismarck the chief original sources in German are Poschinger's edition of Prince Bismarck's Frankfort Letters and Despatches; his Correspondence, by Köppen; his Political Life and Labours, and his Speeches, by Hahn; his Biography, by Hezekiel, and the works of M. Busch entitled "Bismarck and his People." There is an excellent English work, "Prince Bismarck," by Mr. Charles Lowe. Two attempts have been made on the Chancellor's life: the first by a lunatic named Blind, on May 7th, 1866, at Berlin; and the second on July 13th, 1874, by Kullmann, at Kissingen.

"**Bitter Cry, The.**" See OUTCAST LONDON.
Bitumen de Judée. See ENGRAVING, AUTOMATIC.

Björnson, Björnstjerne, Norwegian novelist, dramatist, and poet, b. December 8th, 1832, at Kvikne, where his father was minister. He was sent to the *Bürger and Realschule* at Molde, and (in 1852) to the University of Christiania. Here his literary career began. He sent "correspondences" to various provincial journals, wrote sketches and *feuilletons*, dealing chiefly with folk-life. After managing the Bergen theatre for two years—1857-9—(during which period "Arne" and his drama "Halte Hulda" appeared) he became co-editor of the *Christiania Aftenblad*. In 1860 Björnson travelled in Denmark, Germany and Italy, returning to Norway the following year. In 1866 he edited the *Norsk Folkeblad*. Since then Björnson has lived much abroad. Of late years he has taken an active part in the political movements of Norway, especially in the struggle between the Norwegian peasants and the king. On one occasion Björnson challenged King Oscar; but the challenge was not accepted. Most of Björnson's tales have been translated into English. The best known are those dealing with Norwegian life: "Arne," "Synnøve-Solbakken," "Ovind," "The Fisher Maiden," "A Happy Boy," etc., etc. His play "The Gauntlet" has also been recently translated.

Blachford, Frederic Rogers, P.C., 1st Baron (creat. 1871), was b. 1811. Educated at Eton and at Oriel Coll., Oxford, where he attained a double first-class (1832), a Craven university scholarship, Oriel fellowship, Vinerian scholarship and fellowship, etc.; graduated M.A. (1835),

B.C.L. (1838). Called to the bar at the Inner Temple; appointed registrar of joint stock companies (1845), and a colonial land and emigration commissioner (1846); assistant commissioner for the sale of encumbered estates in the West Indies (1857); was Permanent Under-Secretary of State for the Colonies (1860 till April 1871).

"**Blackbird**" Trade. See COOLIE.

Blackburn, Colin Blackburn, P.C., Baron (creat. 1876), and son of John Blackburn, Esq., of Killearn, Stirlingshire; b. 1813. Educated at Eton and Trin. Coll., Cambridge; graduated B.A. (1835—8th Wrangler). Called to the bar at the Inner Temple (1838), appointed Justice of the Queen's Bench (now Judge of the High Court of Justice, Queen's Bench Division—1859), a Lord of Appeal in Ordinary, with the dignity of a Baron for life.

Black Friday, the 11th of May, 1866, the day on which the great commercial panic of that year was at its height.

Black-Letter Saints' Days. See DAYS OF COMMEMORATION.

Black Monday, June 18th, 1885; so called in consequence of the defeat sustained by Mr. Gladstone by the adverse vote on the budget. This term has also been applied to Monday Feb. 8th, 1886, in consequence of the riots at the West End.

Black Rod. See HOUSE OF LORDS.

Black Sea Conference, The, was a Conference of the European Powers called to meet in London in January 1871, in consequence of a declaration by Russia that she "denounced" her contract in the Treaty of Paris 1856, with regard to the navigation of the Black Sea. By this Treaty, formed at the close of the Crimean war, the Black Sea had been made neutral territory, and Russia had ceded her right to keep armed vessels upon it. Owing to the Franco-German war, France failed to attend until the following March, when the Treaty of London was framed, which deneutralised the Black Sea.

Blacksmiths, The Worshipful Company of. See CITY GUILDS, THE.

"**Blackwood's Magazine**" (2s. 6d.), founded 1817. First editor Prof. Wilson. Conservative in politics, it includes in its pages original articles and reviews on the social and political questions of the day, notices of travels, biographies and subjects of general interest, with a serial novel. Amongst the contributors to its pages have been Sir W. Scott, De Quincy, and other distinguished writers. Present editor, Dr. McOris.

Blades, Mr. John Horton, M.P., was b. 1841. Is an alderman of West Bromwich. Returned in the Liberal interest as member for West Bromwich (1885).

Blaine, Mr. Robert Stickney, M.P., J.P. for Bath; Mayor (1872-73). Returned in the Conservative interest as member for Bath (1885).

Blake, Mr. Thomas, M.P., of Lebanon, Ross, was b. 1825. Chairman of the Ross School Board (1873-85). Returned in the Liberal interest as member for Leominster (1876-80); Forest of Dean Division of Gloucestershire (1885).

Bland Act. See BIMETALLISM.

Blane, Mr. Alexander, M.P. Agent to the Catholic Registration Association. Formerly President of the Prisoners' Aid Society. Returned as a Nationalist for South Armagh (1885).

Blantyre. A mission-station in Africa, founded in 1876 under auspices of Estab-

lished Church of Scotland. Situated on highlands between Lake Shirwa and Shiré river. Is becoming the centre of much independent British settlement and trade. Progress rapid. Already has longer and better roads than exist in the old Portuguese colonies on the coast. Communications by steamers up Zambesi and Shiré, and by newly opened overland route to Quillimane. (See NYASSA, ZAMBESI, etc.)

Blantyre, Charles Stuart, 12th Baron (creat. 1606), was b. 1818, and succeeded his father 1830. Has been a representative peer for Scotland since March 1850.

"**Blue Books**" are the official reports: papers and documents printed for the Government, and laid before the Houses of Parliament. They are uniformly stitched up in dark blue paper wrappers. **Germany**, white; **France**, yellow; **Italy**, green; **Spain**, red; **Portugal**, white.

Blue Ribbon Gospel Temperance Movement. An unsectarian Mission to promote Christianity and total abstinence, originated by Francis Murphy, in America, where it was known as the "Murphy Movement." It was introduced into this country by William Noble, and inaugurated in the Standard Theatre, Shoreditch, on February 10th, 1878. The title of "Blue Ribbon Army," and the "Blue Ribbon" badge were adopted, and the work established in the Hoxton Music Hall, where nightly meetings have since been held. One million pledge cards were issued during the first three years, and the movement spread throughout the United Kingdom. Missions of from three to twenty-one days' duration were conducted in all the principal towns, resulting in thousands of drunkards being reclaimed, and large numbers of Christian people becoming abstainers for the sake of example. In 1883 the word "Army" was dropped from the title; a general committee (President, W. I. Palmer, J.P., of Reading), was appointed, and the work has continued since upon quietly aggressive lines. Permanent councils of representatives exist in Bradford, Birmingham, Manchester, Newcastle, Preston, etc., for the holding of periodical missions, visitation, etc. Returns show that 80 per cent. of converts adhere to the pledge. In Scotland and Ireland the movement has been successfully carried on, and it has been extended to the Continent and the Colonies with satisfactory results. The organ of the movement is the *Gospel Temperance Monthly*. The offices of the General Committee are at 134, Hoxton Street, N.: Treasurer, W. P. Goulding, Esq., 41, Moorgate Street, E.C.; General Secretary, John T. Rae.

Blumenthal, Lieutenant-General Leonard von. A great strategist; b. 1810 at Schwedt-on-the-Oder. He studied at the Military Academies of Culm and Berlin. Was successively appointed Second Lieutenant in the Guard (Fusilier Guards) 1827; Adjutant to Landwehr (1837); Premier Lieutenant of the General Staff (Topographical Division) 1846; and Captain of the General Staff 1849. He was made Chief of the Staff of the Army in Schleswig-Holstein in recompense for his services in that war (1849); Major in the Grand General Staff (1853); Chief of the General Staff of the Mobile Army Corps against Denmark (1863); Major General (1864); Chief of the General Staff of the second army, which invaded Bohemia (1866), and in 1870 Chief of the General Staff, a post he has since held.

Blundell, Col. Henry Blundell-Hollinshead, M.P., of Deysbrook. Educated at Eton and Christ Church, Oxford. Entered the army, Rifle Brigade (1855), and served in the Crimea and Canada; afterwards joined the Grenadier Guards. Is J.P. and Deputy Lieutenant for Lancashire. Returned in the Conservative interest as member for Ince Division, South-West Lancashire (1885).

Board, London School. See LONDON SCHOOL BOARD.

Board of Supervision. See PAUPERISM.

Board of Trade. See CIVIL SERVICE.

Board of Trade Returns. See TRADE OF 1885.

Boat Race, Oxford and Cambridge. This annual contest between the crews of Oxford and Cambridge Universities is rowed on the Thames, from Putney to Mortlake, or the course reversed, the Saturday before Good Friday. The date has, however, occasionally been altered, owing to circumstances of weather, etc.

Year.	Winner.	Place of Rowing.	m. s.	Won by
1829	Oxf.	Henley . . .	14 30	Easily.
1836	Cam.	Westm. to Put.	36 0	1 min.
1839	Cam.	Westm. to Put.	31 0	1 m. 45 s.
1840	Cam.	Westm. to Put.	29 30	$\frac{1}{2}$ length.
1841	Cam.	Westm. to Put.	32 30	1 m. 4 s.
1842	Oxf.	Westm. to Put.	30 45	13 secs.
1845	Cam.	Putn. to Mortl.	23 30	30 secs.
1846	Cam.	Mortl. to Putn.	21 5	2 lengths.*
1849	Cam.	Putn. to Mortl.	22 0	4 lengths.
1849	Oxf.	Putn. to Mortl.	—	Foul.
1852	Oxf.	Putn. to Mortl.	21 36	27 secs.
1854	Oxf.	Putn. to Mortl.	25 29	11 strokes.
1856	Cam.	Mortl. to Putn.	25 50	$\frac{1}{2}$ length.
1857	Oxf.	Putn. to Mortl.	22 35	35 secs.†
1858	Cam.	Putn. to Mortl.	21 23	22 secs.
1859	Oxf.	Putn. to Mortl.	24 40	Cam. sank.
1860	Cam.	Putn. to Mortl.	26 5	1 length.
1861	Oxf.	Putn. to Mortl.	23 30	49 secs.
1862	Oxf.	Putn. to Mortl.	24 41	30 secs.
1863	Oxf.	Mortl. to Putn.	23 6	43 secs.
1864	Oxf.	Putn. to Mortl.	21 40	27 secs.
1865	Oxf.	Putn. to Mortl.	21 24	4 lengths.
1866	Oxf.	Putn. to Mortl.	25 35	15 secs.
1867	Oxf.	Putn. to Mortl.	22 40	$\frac{1}{2}$ length.
1868	Oxf.	Putn. to Mortl.	20 56	6 lengths.
1869	Oxf.	Putn. to Mortl.	20 5	3 lengths.
1870	Cam.	Putn. to Mortl.	22 4	$\frac{1}{2}$ length.
1871	Cam.	Putn. to Mortl.	23 5	1 length.
1872	Cam.	Putn. to Mortl.	21 15	2 lengths.
1873	Cam.	Putn. to Mortl.	19 35	$\frac{3}{4}$ length.‡
1874	Cam.	Putn. to Mortl.	22 35	3 lengths.
1875	Oxf.	Putn. to Mortl.	22 32	10 lengths.
1876	Cam.	Putn. to Mortl.	20 19	5 lengths.
1877	Oxf.	Putn. to Mortl.	—	Dead heat.§
1878	Oxf.	Putn. to Mortl.	22 15	10 lengths.
1879	Cam.	Putn. to Mortl.	21 8	$\frac{3}{4}$ length.
1880	Oxf.	Putn. to Mortl.	21 23	4 lengths.
1881	Oxf.	Putn. to Mortl.	21 56	4 lengths.
1882	Oxf.	Putn. to Mortl.	20 12	7 lengths.
1883	Oxf.	Putn. to Mortl.	21 18	$\frac{3}{4}$ length.¶
1884	Cam.	Putn. to Mortl.	21 39	3 lengths.¶
1885	Oxf.	Putn. to Mortl.	21 36	$\frac{2}{3}$ length.

* First Univ. race in outriggers. † First race in boats without keels. ‡ Sliding seats first used. § Oxford bow man caught a crab. ¶ Rowed on Thursday. ¶ Rowed on Monday.

Boers. The word "Boer," as used in South Africa, is the Cape-Dutch term for farmer, and is applicable to a farmer of any nationality; and although the Boers are mostly of Dutch parentage, there are also a few partly of French origin, being descendants of the Huguenot refugees who emigrated to the Cape at the time of the revocation of the Edict of Nantes. In 1836-37 large numbers of the Dutch Boers, being dissatisfied with the British mode of government, "trekked" northward from the Cape Colony, and settled in what is now Natal (*q.v.*). This was taken possession of and proclaimed a British colony in 1843. The Boers "trekked" again, but their new settlement was annexed in 1848 as the **Orange Sovereignty**. They then began to form the present **Transvaal** (*q.v.*), and in 1854, when the Orange Sovereignty was given up, it became the **Orange Free State** (*q.v.*). Here they had to fight their way against the natives, whose lands and cattle they appropriated, and whose children they enslaved. Wars were consequently frequent, and as their families increase very rapidly, the border Boers are continually migrating farther into the black man's country. The Boer is a strict Calvinist. He is naturally hospitable, but has become suspicious of strangers. The family life of the Boers is based on the patriarchal type of government—*i.e.*, each man to govern himself, his family and his servants, as he thinks best. Amongst those who have wandered far from their original homesteads, may be mentioned the **Dopper Boers**, peculiar both in religion and in dress; and the **Trek Boers**, who live in their bullock waggons a nomadic life, moving with their families, flocks and herds from one part of the country to another, and remaining only as long as the wood, water and grass suffice for their needs. There are also the **Bijvooner Boers**, who, having no farms of their own, are content to live by suzerainty upon the farms of their more wealthy neighbours and relations. The term **Vee-Boer** signifies stock farmer—*groot-vee* being cattle, and *klein-vee* sheep, goats, etc.

Bohn, H. G., b. 1796, d. August 22nd, 1884, aged eighty-eight. A well known bookseller, scholar, philologist, publisher, and indefatigable collector of works of art. Among the published works few are so well known as the translated edition of the classics which bear his name, as well as others bearing on almost every subject of scientific study and research.

Bohn's Libraries. A series of works—under the titles of Bohn's "Standard," "Classical," "Antiquarian," "Philosophical," "Scientific," "Theological," "Historical," "Reference," and "Illustrated" libraries—consisting chiefly of reprints of earlier and more or less standard books, both English and translated. Mr. H. G. Bohn (d. 1884) published the first volume in 1846; the series, then numbering several hundred volumes, was, on his retirement from business in 1864, bought by Messrs. Bell and Daldy (now Bell and Sons), who have since (to 1885) increased the number to 663 volumes.

Bokhara. A Russian vassal state in Central Asia attached to the province of Turkestan. The campaigns conducted by Tcherniaeff, Romanovsky and Kaufmann between 1860 and 1870 brought the khanate into great prominence. After Russia had captured Samarcand and reduced Bokhara to its present proportions, public interest in it subsided. During the Khivan expedition (1873), Bokhara maintained a friendly attitude, but afterwards the Ameer

became cold and exclusive until 1878, when Kaufmann sent a mission to demand permission for the passage through Bokhara of the army intended to penetrate to Cabul and attack the English in India. From this period every pretext was employed to break down the quasi hostility of Bokhara. What little power was left the khanate lapsed in 1884 by the practical enclosing of the country, resulting from the annexation of Merv. At no distant date Bokhara will probably be completely placed under Russian administration, particularly now that the Russians require to constantly traverse the country in passing from Merv to Tashkent. The Emir has recently (Feb. 6th, 1886), given assurances to the Russian mission sent to him that he will do nothing to hinder the construction of the Merv-Bokhara railway. Although the area of Bokhara is only 100,000 square miles, or one-fifteenth the whole Central Asian region conquered since 1860 by Russia, its population is 2,000,000, or one-third the entire total. The city of Bokhara (pop. 70,000) is the principal commercial centre of Central Asia. The Ameer, Mozaffar Eddin, is allowed to maintain an army of some 30,000 troops, which, until 1885, were ill trained and badly armed, but are now drilled by Russian instructors and furnished with Berdan rifles. In the event of a war with England, Russia could march her Turkestan army through Bokhara to the Oxus, and operate in that direction against Cabul, while the Transcasian forces concerned themselves with Herat. The large trade which India once carried on with Bokhara has now been almost completely absorbed by Russia.

"Bolena, Anna." See DONIZETTI.

Bolingbroke, Henry St. John, 5th Visct. (creat. 1712), was b. 1820, and succeeded his father 1851. The 1st Visct. was the celebrated minister of Queen Anne.

Bolivia. A republic ruled by a President with a Congress of two chambers, elected in theory by universal suffrage, in practice by the army. Area 842,729 square miles. Pop. 1,957,352. Revenue in 1880 said to be £693,000; expenditure £960,000; debt about £6,000,000. Army, fixed at 1400 in peace, and commanded by eight generals and 1013 other officers, absorbs about two-thirds of revenue. There is little to chronicle since 1870, except the war with Chili, from 1879 to 1883 inclusive, in which Bolivia was allied with Peru (for which see article on Chili), and a dreary record of anarchy and civil war.

Bolometer, an electrical instrument, invented by Professor P. Langley, for measuring radiant heat (see *Nature*, November 3rd, 1881).

Bolton, Mr. Joseph Cheney, M.P., was b. 1819. Formerly a merchant in Glasgow. Late President of the Glasgow Chamber of Commerce. Is Chairman of the Caledonian Railway Co. Returned in the Liberal interest as member for Stirlingshire (1885).

Bolton, Mr. Thomas Henry, M.P., solicitor, was b. 1841. Connected with the Executive Committee of the Farmers' Alliance, and President of the Anti-Extraordinary Tithe Association. Returned in the Liberal interest as member for North St. Pancras (1885).

Bolton, William Henry Orde-Powlett, 3rd Baron (creat. 1797), was b. 1818, and succeeded his uncle 1850.

Bomvanaland. See KAFFRARIA.

Bonapartists. See FRENCH POLITICAL PARTIES.

"Bon Gaultier." See NOMS DE PLUME.

Bonn, O. C. Synod at. See OLD CATHOLICS.

Bonsor, Mr. H. Cosmo, M.P., was b. 1848. Educated at Eton. He is a Director of the Bank of England, and a Governor of Guy's Hospital. Connected with the firm of Coombe and Co., brewers. Returned in the Conservative interest as member for North-East Surrey (1885).

Bonze. Name given to the priests of Buddha in China, Burmah, Japan, etc. They live in monasteries, and are unmarried. There are also female bonzes, who resemble nuns.

Book Trade. The statistics of new books, and reprints of previously published books for the past ten years, are as follows:

Year.	New Books.	New Editions.	Year.	New Books.	New Editions.
1876	2931	1957	1881	4110	1296
1877	3049	2046	1882	3978	1146
1878	3730	1584	1883	4732	1413
1879	4294	1540	1884	4832	1541
1880	4293	1415	1885	4307	1333

The following table shows the number of new books and new editions published during 1884 and 1885, divided into fourteen broad classes:

Divisions.	1884.		1885.	
	New Books.	New Editions.	New Books.	New Editions.
Theology and Devotion	724	205	636	211
Education and Philology	543	140	533	119
Juvenile Books	603	154	671	142
Fiction and Minor Fiction	408	289	455	240
Jurisprudence	163	116	72	57
Political Economy and Commerce	203	36	210	43
Arts, Sciences, and Illus. Books	432	159	264	109
Books of Travel	236	95	169	70
History, Biography, etc.	490	133	375	106
Poetry and the Drama	179	49	118	46
Year - Books and Serials (in vols.)	323	1	337	10
Medicine and Surgery	160	55	116	71
Belles-Lettres	160	79	146	74
Miscellaneous (incl. Pamphlets)	208	30	205	35
	4,832	1,541	4,307	1,333
		4,832		4,307
		6,373		5,640

A list of all the books issued by the London publishers, and those Scottish, Irish and pro-

vincial publishers whose books bear also a London imprint, is published every month in the *Bookseller* (6d.), and fortnightly in the *Publishers' Circular* (3d.). A *Classified Bibliography* of the best current literature is being compiled by Mr. Sonnenschein, the publisher, to be issued under the title of *The Best Books*; and containing, as it will, the prices, sizes, publishers' names, and the dates of the first and last editions of each book, it will doubtless form a useful and reliable guide to readers and book-buyers. Authors and publishers have lately complained very much of the "disorganised state" of the book trade, which they maintain is owing to the growing system of discounts allowed for competitive reasons to the public by the retail booksellers, resulting in a fictitious published price, which cannot be maintained. But the cry is not new, nor is the system recent: in 1829 the principal London publishers formed themselves into a *Booksellers' Association*; fixed the amount of discount to be allowed to the trade, and forbade them to sell books at less than the full published price; but in 1852 a dispute arose, in which the booksellers denied the validity of the arrangements, maintaining that they had a right to sell at any price they pleased goods which they had legitimately purchased. The question was ultimately referred to Chief Justice Campbell, who decided against the Publishers' Association, which was shortly afterwards dissolved. (See also AUTHORS AND PUBLISHERS.) Among the more prominent literary men who have died during 1885 may be mentioned **M. Edmund About**; **Mr. Henry Bailey**, editor of *Baily's Sporting Magazine*; **Dr. Samuel Birch**, of the Brit. Mus.; **Mr. J. F. Campbell**, of Islay, antiquary; **Mr. E. Carruthers**, editor of "Chambers' Cyclopædia of English Literature"; **Mr. John Colquhoun**, author of "The Moor and the Loch"; **Prof. G. Curtius**; **Mr. Frederick Fergus** ("Hugh Conway"); **Dr. Andrew Findlater**; **Lady Georgiana Fullerton**, novelist; **Prof. Jenkin**, Edinburgh; **Mr. Evelyn Jerrold**; **Mr. H. A. J. Munro**; **Constantin Rossetti**, the Roumanian poet; **Mr. E. O. Rye**, librarian of the Geogr. Society; **Principal Shairp**, Prof. of Poetry at Oxford; **Mr. Alex. Somerville**; **Mr. William J. Thoms**, F.S.A., founder of *Notes and Queries*; **Mr. Charles Tucker**, F.S.A.; **Prof. Henry Alford Vaughan**; **Mr. W. S. W. Vaux**; **Dr. W. Veitch**, Greek scholar; **Mr. Cornelius Walford**, author of the "Insurance Cyclopædia"; **Susan Warner** ("Elizabeth Wetherell"), author of "The Wide, Wide World," etc.; **Mr. Hodder Westropp**, archaeologist; **Mr. Richard Grant White**, critic.

Book of the Dead, The. See EGYPTOLOGY.

Book of Job, The. See REVISED BIBLE.

Bookseller. See BOOK TRADE.

Booksellers' Association. See BOOK TRADE.

Boord, Mr. Thomas William, M.P., was b. 1838. Educated at Harrow and in Germany. Is a member of the firm of Boord and Son, distillers, etc. Returned in the Conservative interest as member for Greenwich (1873-85); re-elected 1885.

Booth, Mr. Edwin. See IRVING, HENRY.

Bori Valley. See ZHOBI VALLEY EXPEDITION.

Borlase, Mr. William Copeland, M.A., F.S.A., M.P., of Laregan, Penzance, was b. at Castle Horneck, near Penzance, 1848. Educated at Winchester and Trinity College, Oxford, where he graduated M.A. Entered parliament in the Liberal interest as member

for East Cornwall (1880-85); elected for Mid Cornwall (St. Austell Division) 1885. Mr. Borlase is the grandson of the distinguished Dr. Borlase, the antiquarian, and author of the "History of the Antiquities of Cornwall."

Borney. See FRANCE.

Bornu. See SOUDAN.

Boro-Glyceride. A chemical compound of boracic acid with glycerine, patented by Prof. Barff. It consists of glycerine, the water of which has been expelled and replaced by anhydrous boracic acid, forming a new compound which is represented by the formula $C_3H_5BO_3$. It is a powerful antiseptic, and being perfectly harmless is a most efficient preservative for food. Its solution in water (1 to 30) is odourless and practically tasteless: oysters opened and immersed in such a solution have been kept perfectly sweet for many months. When a small amount is added to cream, the latter undergoes no change in the hottest weather, and thus prepared has been sent both to Jamaica and Zanzibar, arriving quite sweet in either case. Besides its use in preserving food, it is used as an antiseptic in surgery, and on the toilet table for corns, cuts, &c.

Borthwick, Sir Algernon, M.P., was b. at Cambridge, 1830. Educated at Paris and King's Coll., London. Is proprietor and editor of the *Morning Post* (q.v.). Returned in the Conservative interest as member for South Kensington (1885).

Borthwick, Cunningham Borthwick, 12th Baron (creat. 1452), was b. 1813. Appointed a representative peer for Scotland (April 1880).

Boscawen, Mr. See BIBLICAL ARCHÆOLOGY.

Bosnal. See AUSTRO-HUNGARY.

Bosnia and Herzegovina. Two Turkish provinces placed under Austrian rule by virtue of the Treaty of Berlin. Their united area is 27,000 square miles, and the population a little more than 1,000,000, of whom two-fifths are Mohammedans, two-fifths Russo-Greek, and one-fifth Roman Catholic; but the races and religions are so mixed in the various districts that it would be almost impossible to create from the medley a single harmonious state of any size. It was expected, none the less, that the provinces would be difficult to rule; instead of which, Austria occupied them with very little difficulty, and with the exception of a slight seething in 1882, rapidly quelled, the 15,000 troops garrisoning the country have had no serious difficulties to contend with. It is this easy annexation of a piece of territory much larger than Bulgaria or Servia that has stimulated Austria, so long reluctant, to adopt a "forward" policy in the Balkan peninsula.

"Bosphore Egyptien." A daily journal printed in French, and published at Cairo. It is supposed to represent French interests in the dual control of Egyptian affairs; and during the complications which for the time terminated in Lord Wolseley's campaign of the Soudan (q.v.), the death of General Gordon (q.v.) and the Mahdi (q.v.), became notorious for its attacks upon the English, and for statements which were looked upon by many as wilful misrepresentations. On April 8th, 1885, the premises were suddenly entered by the Cairo police, the contents seized, and the paper suppressed; this summary proceeding, it was stated, being brought about for publishing in Arabic the previous evening a proclamation by the Mahdi. The French diplomatic agent at once protested against the action of the autho-

rities and the violation of his countrymen's domicile. Nubar Pasha (q.v.), the Egyptian prime minister, subsequently remained firm in the position he had assumed, and, in view of future difficulties, the police guards were doubled and the troops confined to barracks at night. The affair gradually assumed important proportions, a telegram dated Cairo, April 15th, stating that the French Government had expressed the opinion that, while the Egyptian Government would under the circumstances have been justified in suppressing the sale of *Le Bosphore Egyptien* in the streets only, they had no right, under the terms of the International Convention, to force the domicile of the printer. A formal protest from Paris reached Cairo on April 17th, when England was understood to occupy a disinterested position in the affair. Subsequently it was stated that a demand was made for the reopening of M. Barrière's printing office and the punishment of the police officer who conducted the raid. After further correspondence, and the assumption of a bellicose position by a portion of the French press, it was announced (April 20th) that Nubar Pasha had replied that certain capitulations had been agreed to, but that he had to consult the Ottoman Government. On the following day the French said they could give no more time, and Nubar replied that he must consult the English Government. In the meantime, April 20th, Mr. Gladstone, in reply to questions in the House of Commons, said that a correspondence was going on with reference to the dispute, and that Her Majesty's Government desired that the Egyptian Government should act in strict conformity with the law. Speaking generally, he added, Her Majesty's Government was not in a position to disclaim responsibility for the suppression of the journal in question. On April 24th diplomatic relations between Egypt and France were considered to be interrupted at Cairo. It was stated that the French diplomatic agent had been instructed to leave for Alexandria on the following day, in event of the note forwarded to the Egyptian Government not eliciting a favourable reply, and to depart from the country altogether on the evening of that day. It was understood that if the latter step were deemed necessary the care of French interests would be left to the Consul, and, in case communications were finally severed, to the Russian diplomatic agent. Three French war-vessels at this time in the Suez Canal, with troops, were, it was added, ordered to break their journey. On April 28th, however, it was announced at Paris that through the intermediation of England a settlement had been arrived at: that the Egyptian Government would apologise to the French Government, that the office would be reopened, and that the journal would be allowed to reappear immediately by permission of the French Government. It was afterwards ascertained that the question of punishing the police officer had been abandoned. On May 20th *Le Bosphore Egyptien* reappeared at Cairo, and on the same day Tigrane Pasha had an interview at Paris with M. de Freycinet (then Minister of Foreign Affairs) on the subject of the relations of the Egyptian Government to the foreign press in Egypt. By a singular coincidence there was issued on the same day to the members of the House of Commons a parliamentary paper containing the official correspondence of the British Government on

this incident. This commenced with a complaint by Sir Evelyn Baring, dated in January, concerning the French press in Egypt, and suggesting that a representation should be forwarded to the French Government. This was done; and Lord Lyons, the British ambassador at Paris, obtained a promise from M. Ferry, the Premier (who shortly afterwards went out of office), that the agent at Cairo should be instructed to do all he could to abate the evil. On March 20th Sir E. Baring informed the Government that Nubar Pasha proposed to notify the suppression of the *Bosphore Egyptien*, and enforce it; and three days afterwards Earl Granville, Secretary for Foreign Affairs, replied that the Government saw no cause to interfere. Then followed the events as mentioned above. On April 10th Lord Lyons forwarded a statement of M. de Freycinet that the question was a very serious one, and that redress must be insisted upon. On the next day Earl Granville informed Sir E. Baring that the Government were of opinion the best course would be for the Egyptian Government to maintain a conciliatory attitude while adhering to their legal position. On April 15th his lordship further informed Sir Evelyn that M. de Freycinet complained of the closing of the printing establishment and the ill-treatment of the officials of the French consulate, setting aside entirely the question of suppression of the newspaper; and the noble Earl asked whether Nubar Pasha could not propose to reopen the printing office without allowing the newspaper to appear. Further correspondence followed on the legal aspects of the question; and on April 25th Earl Granville had an interview with M. Waddington, who said M. de Freycinet had no wish to shield the *Bosphore* or prevent its being properly dealt with, but there had been an infraction of a French domicile and an affront to a French representative, and for this it was necessary to have reparation. The cabinet decided the same day to advise Nubar that the printing office should be reopened, but that, as the officials acted under orders, they should not be punished; and two days later they advised him to express regret for incidents which attended the suppression. These terms the French Government accepted. The whole correspondence concluded with a letter from Lord Lyons, April 29th, conveying an expression of M. de Freycinet's high sense of the friendly attitude of Earl Granville in the matter. As above stated, *Le Bosphore Egyptien* reappeared in May; and although attention has been called to its contents more than once in the English newspapers, no official complaints, so far as is known, have been made. An action was subsequently brought against the Egyptian Government for closing the offices, and it was reported from Alexandria (Jan. 18th) that the case had been decided in favour of the proprietor, the amount of damages to be settled by arbitration.

Bosphorus. A channel, nineteen miles long, connecting the Sea of Marmora with the Black Sea and with the Dardanelles on the western side of the former, forming the outlet of the Black Sea into the Mediterranean. It has no equal in the world for the depth of its bed, and the numerous bays with which its steep cliffs are furrowed afford everywhere such a safe anchorage that the whole channel may be regarded as a continuation of the roadstead of Constantinople. Men-of-war

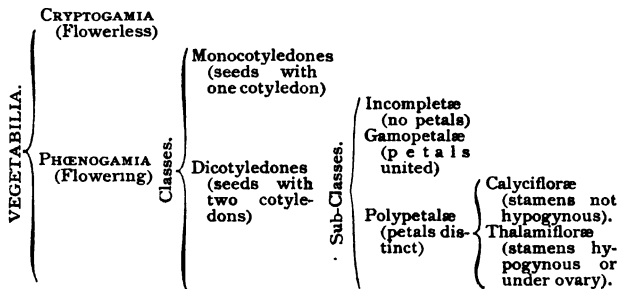
can approach so close to the banks that they strip the foliage off the trees. The channel is defended by a series of strong forts, so well placed and powerfully armed as to render the passage of a Russian fleet practically impossible, even without taking into account the strings of torpedoes that would bar the waterway in time of war. Thus a Russian naval attack upon Constantinople is an improbable event; and now that Russia, by the rapid development of her southern fleet, is acquiring naval preponderance in Turkey, she would doubtless utilise her strength, in the event of hostilities, in making a descent upon European or Asiatic Turkey, and strike for the Sea of Marmora overland, rather than attempt to force the passage of the Bosphorus.

Boston, George Florence Irby, 6th Baron (creat. 1761), was b. 1860, and succeeded his father 1877. Has been a Lord-in-waiting to the Queen since June 1885.

Botany (*botanê*, a grass), the study of plants. The divisions of this subject will be understood best by reference to the article on BIOLOGY. **Morphological Botany** deals with the structure of plants. The investigation of the structure of organs is **Anatomy**; that of the minute structure of the tissues is **Histology**. **Physiological Botany** deals with the functions of plants; **Systematic Botany** with their classification. A fourth branch of the subject investigates the geographical and geological distribution of plants. A few words will be said on each of these divisions, and on the position of knowledge in respect to each; the most remarkable of recent discoveries in botany will be noted, and the best works of reference on this subject named. **Morphological Botany.** Here the tendency of late years has been to devote special attention to the **Cryptogams** or flowerless plants, rather than to the **Phanogams** or flowering plants, and to histology rather than to anatomy. The elder botanists worked chiefly at the anatomical structure of the ordinary and generally well-known flowers and trees. The younger school have worked chiefly at the histological structure of these, and at the life-history of that lower sub-kingdom of plants, the **Cryptogamia**, which their predecessors had largely ignored. Hence, in place of the old habit of specious mongering, we have discoveries not only bearing on vegetable structure specially, but having relation to the anatomy and histology of living things generally. The careful working out of the **Cryptogamia** tells in both these ways. Thus the study of the higher members of this lower of the two sub-kingdoms of plants reveals its connection with the higher sub-kingdom, **Phanogamia**, and gives the key to the probable order of the evolution of these from their lower fellows. Again, the study of the lower forms of the **Cryptogams** reveals their connection with the lowest forms of the animal kingdom, and gives the key to the probable evolution of the lower living forms generally. In **Histological Botany** three of the most important conclusions recently reached have to do with the cell-contents, the classification of tissues, the fibro-vascular bundles. *a.* The substances found in the young living plant-cell are (1) **Protoplasm** (*q.v.*), (2) **Nucleus** (*q.v.*), (3) **Plastids**. This last is, therefore, a general name for all bodies other than the protoplasm and the nucleus that occur in young, active cells. Three types are known

Chloroplastids (*chloros*, green); **Leukoplastids** (*leukos*, white); **Chromoplastids** (*chroma*, colour). All are formed from minute protoplasmic bodies—i.e., not in, but from, the protoplasm. The first are green, and give rise to **chlorophyll**, the green colouring-matter of plants; the second are white, and give rise to starch; the third are pigment-bodies of other hues than green. The two latter are called together **trophoplasts** (*trephō*, I nourish), as they give rise to the chloroplasts. *b.* The tissues of plants are all reducible to three types: **epidermal**, on the exterior; **fundamental**, making the mass of that which is included within the epidermal; **fascicular**, or bundle-tissue, of fibres and vessels traversing the fundamental. *c.* The fascicular, or fibro-vascular bundles contain two chief constituents, xylem and phloem, together with other structures. **Xylem** (*xylon*, wood) is of thick-walled cells and of vessels. **Phloem** (*phloion*, bark), or bast-tissue, is of cells, mostly thin-walled, and sieve-tubes—i.e. tubes with perforated partitions, through which threads of protoplasm run. If the xylem and phloem lie side by side in a fibro-vascular bundle, this is **collateral**; if the phloem encloses the xylem, the bundle is **concentric**. The composition and arrangement of these bundles are characteristic not only of groups of plants, but often of individual species. In **Physiological Botany** some of the most important points of late years have had to do with chlorophyll, the food of plants, the movement of water in the plant, movements generally, and the fertilisation of plants. *a.* **Chlorophyll** (*phullon*, plant) is formed under the influence of light of not too high and of not too low an intensity. It is intimately related to the assimilation of carbonic acid gas by the palisade cells, just beneath the upper epidermis of leaves, and by other parts of the plant, and to the decomposition of the carbon dioxide, and the fixation of the carbon. **Chlorophyll** is a mixture, not a compound, of **xanthophyll** (*xanthos*, yellow), and **cyano-phyll** (*kuanos*, blue), diffused through colourless protoplasm. **Xanthophyll** and **cyano-phyll** are in the proportions one to another of about one or a hundred. *b.* The food of plants is now known to be in many cases organic. See

Darwin's "Insectivorous Plants," which first popularised this fact. Since its publication the Pitcher plants have also been shown to be insect eaters, and the Bladderwort (*Utricularia*) has been found to catch newly hatched fish and to kill them. These animal food stuffs are acted on by two kinds of ferments in the plants; one allied to the pepsin of the human stomach, the other to the pancreatin of the human pancreatic fluid. *c.* The movement of water in plants is through the wood tissue and the younger cells of that tissue. It is not due to capillary action, nor wholly to pressure from below. The molecular structure of the cell-walls presents myriads of crystalline molecules, or **micellæ**, each enveloped by water. According to the relative proportions of micellæ and water the tissue is more or less dense. The water moving through the plant is taken up into the cell-walls between the micellæ, as the salt-molecules are between the water-molecules of the sea. *d.* Movement is practically universal in living parts of plants (see Darwin's "Power of Movements in Plants"): "Apparently every growing part of every plant is continually circumnating [moving like the stem of a climbing plant]." *e.* Self-fertilisation in plants has been demonstrated as rare. Sprengel in 1859 first called attention to the frequency of cross-fertilisation by the agency of insects. Darwin, Hildebrand, Delpino, Hermann and Fritz Müller have shown that cross-fertilisation is nearly universal, and that more, larger, and more fruitful plants result from cross-fertilisation between two flowers of the same kind than from self-fertilisation of the ovule of a flower by pollen from the same flower. Main devices by which cross-fertilisation is effected: (1) **Diölinism** (*duo*, two, *kline*, bed). Stamens (male), and carpels (female) in different flowers. (2) **Dichogamy** (*dichos*, double, *gamos*, marriage). Stamens ripe before carpels, flowers protandrous; or carpels ripe before stamens, flowers protogynous (*protos*, first, *anēr*, man, *gunē*, woman). (3) **Heterogony** (*heteros*, different, *gonous*, parent). Stamens and carpels of different lengths (see DIMORPHISM). **Classification.** The system most in vogue is a modification of that of De Candolle (1778-1843):—



New points in classification, Schwendener's demonstration that the group Lichens is really a set of Algae, with fungi parasitic on them, is most important. Of new botanical ideas generally, we note the discovery of apospory in ferns—i.e., the development of adventitious

prothallia on the frond directly, the continuity of protoplasm (*q.v.*), the discovery of prothallia of Lycopodium, that epidermal cells not only protect, but store up water, and that the cells concerned in conjugation in the lower Cryptogams differ in nature, the female being

the larger, while the protoplasm only passes in one direction, and not from each cell to the other. **Works of reference.**—In English, Sachs' Text Book (Vines, translator), Prantl's Botany (Vines, translator), Thomé's (Bennett, translator), De Bary's "Vegetative Organs of Phœnogams and Ferns" (Vines and Bower, translators), Henfrey's Botany (edited by Masters and Bennett), Hillhouse's Practical Botany, based on Strasburger, Bower and Vines' Practical Botany. For **Systematic Botany**: England, Hooker's Student's British Flora, Benthams' British Flora. Generally, Hooker and Benthams' "Genera Plantarum," describing 7,565 genera of plants. For **Commercial purposes**, Thomas Christy's "New Commercial Plants" (in progress). For **German students**, besides the originals of the above translations, Sachs' "Vorlesungen über Pflanzen Physiologie," Schwendener's "Das mechanische Princip," Strasburger's "Des botanische Practicum," Haberlandt's "Physiologische Pflanzenanatomie"; and for **specialists** the "Handbuch der Botanik" (in progress), to which the best German botanists contribute.

Botany Bay. See AUSTRALIA.

Botta, M. See ASSYRIOLOGY.

Boudet's Stethoscopic Microphone. See MICROPHONE.

Boulder Clay. See GLACIAL PERIOD.

Bourke, The Rt. Hon. Robert, P.C., M.P., was b. 1827. Educated at Enniskillen School, and Trin. Coll., Dublin. Called to the bar at the Inner Temple (1852). Was Under-Secretary for Foreign Affairs in the last cabinet of Lord Beaconsfield, and held the same office under Lord Salisbury in the late Government. Returned in the Conservative interest as member for King's Lynn (1868-80); re-elected 1885.

Boussard, M. See EGYPTOLOGY.

Bower Lamp, The. See ILLUMINANTS.

Bowyers, The Worshipful Company of. See CITY GUILDS, THE.

Boyle, Baron. See CORK AND ORRERY.

Boyle Lectures. In 1691 Robert Boyle, son of the famous Earl of Cork, provided by will for the delivery of eight lectures "in vindication of Natural and Revealed Religion." The lectures are published in book-form after their delivery, and have been given of recent years by some of our ablest theologians.

Boyle, Mr. Robert Whelan, F.R.S.L., is a native of Ireland; connected on the maternal side with the late Sir Thomas Whelan, and Rev. Canon Whelan, the present Protestant rector of Maynooth. Mr. Boyle served his apprenticeship to journalism in the office of a country newspaper proprietor. In view of a future literary career, he left the provinces for Dublin, whence he proceeded to London, and became "reader" to one of the papers, and contributed to various journals. He subsequently became assistant sub-editor of a well-known London "daily," and after several years' experience in this capacity he was appointed to the editorship of a provincial newspaper. On his return to London he became chief sub-editor of *The Hour*. In 1877 he was appointed to the editorship of the *Daily Chronicle*, the great success of which has been a striking feature in contemporary journalism.

"**Box.**" See NOMS DE PLUME.

Boyne, Gustavus Russell Hamilton Russell, 8th Visct. (creat. 1717); Baron Brancepeth, by which title he sits in the House of Lords;

b. 1830. The 1st Visct. was a distinguished officer in the service of William III.

Brabazon, Lord. See MEATH, EARL OF.

Brabourne, Edward Hugessen Knatchbull Hugessen, P.C., 1st Baron (creat. 1880), was b. 1829. He was a Lord of the Treasury (June 1855 to May 1866), Under-Secretary of State for the Home Department from the latter date till July 1866, and from Dec. 1868 till Jan. 1871, and Under-Secretary for the Colonies from the latter date till Feb. 1874; was M.P. for Sandwich (April 1857 to May 1880), when he was raised to the peerage.

Brachiopoda. See ZOOLOGY.

Brackley, Visct. See ELLESMERE.

"**Braddon, Miss.**" See NOMS DE PLUME.

Bradford, Orlando George Charles Bridgeman, P.C., 3rd Earl of (creat. 1815), Visct. Newport (1815), was b. 1810, and succeeded his father 1865. Master of the Horse to the Queen (Feb. 1874 to May 1880), to which latter office he was reappointed June 1885. Is descended from Sir Orlando Bridgeman, who was successively Chief Baron of the Exchequer, Chief Justice of the Common Pleas, and Keeper of the Great Seal.

Bradlaugh, Mr. Charles, M.P., b. 1833, in the east of London. Commenced life at twelve, in a solicitor's office. A Sunday-school teacher at first, he commenced open-air speaking as an advocate of religion, but soon became known as an anti-religious orator and pamphleteer. Unable to make way in business because of the unpopularity of his opinions, he enlisted (1850-51). In 1853 purchased his discharge and again entered a solicitor's office. Married in 1854. Began to write and lecture as "Iconoclast." Took a leading part in the agitation against the Sunday Trading Bill (1855); commenced lecturing in the provinces; at Northampton in 1857. In 1858 held first public debate on theology; was editor of the *Investigator* and president of the London Secular Society. Took active part in the Simon Bernard trial acquainted with Mazzini. *National Reformer* founded 1859; edited this with Joseph Barke for a time. Agitated in the Oaths question (1866). Re-edited the *National Reformer* alone and took part in the meeting of the Reform League in Hyde Park. Government attack of the *National Reformer* fails (1868-9). First contest for parliament at Northampton 1866. Contest re Oath, ending in Act of 1870—the witnesses may affirm (see AFFIRMATION). Mixed up with French and Spanish affairs as Prince Jerome Napoleon. Opposed to the Commune. Tour in America lecturing (1873). Second and third contest at Northampton. Second and third American journey. He wrote in conjunction with Mrs. Besant (1874). Attack of the "Fruits of Philosophy" (1875). Fourth contest for Northampton (1880)—elected M.P. Re-elected by Northampton (see AFFIRMATION). BILL and GREAT BRITAIN the last time a general election of 1885, and admitted to take the oath on the opening of parliament, Jan. 18th 1886. A voluminous pamphleteer on anti-religious and radical topics.

Brahms, Johannes, b. at Hamburg 1833 and was the son of an undistinguished but hard-working musician. An eulogistic critique of Schumann's brought Brahms into prominence. In 1861 he went to Vienna, where he has since resided, and devoted himself to composition. His great "German Requiem" (1868)

established his reputation. Brahms is the composer of many symphonies, "Rinaldo," "The Song of Destiny," songs, cantatas, etc. His unrivalled settings of "Hungarian Dances," and his own "Liebeslieder," dances with choral accompaniment are the most graceful classical compositions of the kind since Chopin.

Braidism (synon. Hypnotism). Braidism is the name applied to a method of cure which is supposed to be produced by the action of the concentrated mind upon the disordered part of the body during the hypnotic state. James Braid, of Manchester, first investigated it in a scientific manner. It can be produced only in a certain proportion of persons, and varies in different degrees of intensity, from a condition resembling the somnambulistic state to that of profound nervous sleep, during which an operation can be painlessly performed. Esdaile, in India (1846), succeeded in thus operating upon the natives of that country, who appear to be peculiarly susceptible to its influence. The method of inducing the trance-like state is to make the patient fix his eyes and rivet his mind upon a small piece of bright metal, held about a foot above his eyelids; after the space of about fifteen seconds it will be found that, in elevating an arm or leg, he has a disposition to retain it in that position. If this is not the case, Mr. Braid writes: "In a soft tone of voice desire him to retain the limbs in an extended position, and thus the pulse will become speedily accelerated and his limbs in process of time quite rigid and involuntarily fixed." Braid rarely went so far as to produce total unconsciousness, but whilst the patient was in this semi-cataleptic state he made him concentrate his whole mind upon the part affected, so that under its influence the vascularity, innervation, and function of the part was regulated and modified according to the locality of the disorder. (See HYPNOTISM.)

Brain. An attempt to localise the mental and moral functions of the brain (phrenology) was made by the celebrated Dr. Gall, who delivered his first lecture at Vienna in 1796. His deductions were based upon observations made by comparing the heads of savants, criminals, and others; wherefrom he concluded that by an examination of the bony prominences and depressions of the exterior of the skull, the especial region of the several mental and moral attributes could be localised in the subjacent parts of the brain. Subsequent investigations have shown that his conclusions were erroneous; however, they served the purpose of inciting other inquirers to similar research. Localisation of the functions of the brain is therefore no novelty, but Bichat was the first to clearly formulate and demonstrate its scientific importance. Physiology requires us to know what portions of the brain govern the different parts of the body in their organic life, and in what regions are situated the centres which preside over the various senses and control the different movements. Pathological physiology has to establish the connection between the functional disorders noticed during life and the lesions revealed *post mortem*; by these means and others, derived from chemical observation and direct experiment, we become acquainted with the particular part played by the centres of brain and spinal cord in the processes of health and disease. The brain does not represent a single homogeneous organ, but rather a confederation of different organs, each

of which has distinct functions and faculties. It is divided into two hemispheres, symmetrical in general outline, but differing somewhat as regards the shape of their convolutions, and is made up of grey and white substance; the former, comprising the psychomotor regions, is distributed over the external surface of the convolutions and in the central nuclei; whilst the latter, which constitutes the internal part (wherein the ventricles are hollowed out), forms a connection between the two hemispheres and between distant parts of the same hemisphere, whilst it also connects the grey matter of the cortical substance with the central ganglionic nuclei, optic thalami, corpora striata, etc., and these again, through the crura cerebri, with the medulla and spinal cord, many of the fibres passing from the cortex directly through the crura to the pyramidal tracts of the cord. The external surface of the cerebral hemispheres is divided into frontal, parietal, occipital, and sphenoidal lobes, whose boundaries are formed by the fissures or sulci, each lobe being composed of convolutions, lobules, or gyri. These convolutions were first given a nomenclature by Leuret and Gratelet, who pointed out the fact that a regular plan existed as to their disposition, which could be followed from the lower animals through the ape to man. Some are absolutely regular, and called fundamental, whilst others, which are variable, are called secondary or accessory folds. The brain is divided into motor and sensory regions, in each of which there are definite centres with definite functions. Much more importance has of late years been attached to its topography; and comparative anatomy has rendered great assistance by showing the resemblances and differences in the development and structure of the brain in man and apes. So far as the fundamental folds are concerned, there exists a striking resemblance, wherefrom Professor Ferrier argued that he could make direct physiological experiments upon monkeys to ascertain the position of the centres which control the functions in man. Fritsch and Hitzig have been workers in the same field of research; and Bischoff, Broca, Burdach, Heubner, Ecker, Arnold, Hughlings Jackson, Duret, Gromier, and Charcot, have made similar investigations from different standpoints. Duret of Paris, and Heubner of Leipzig, although pursuing their researches separately, simultaneously arrived at identical results, basing their conclusions upon the fact of the arterial circulation governing the situation in the domain of cerebral pathology; others have studied the anatomical distribution of the various fibres composing the pyramidal tracts and columns of the spinal cord, tracing them to their final terminations in the central nuclei and grey matter of the cortex; whilst Charcot has carried out the most exhaustive investigation from a clinico-pathological point of view. In the frontal lobe the principal convolutions are called first, second and third frontal, and ascending frontal; this last is separated by the fissure of Rolando from the parietal lobe—its upper extremity forming, with the contiguous parts which lie immediately around the fissure of Rolando, the centre for complex movements of the opposite leg and arm, and of the trunk, as in swimming (Ferrier). The posterior extremity of the first or superior frontal is the centre for movements of extension forward of the opposite arm and

hand, whilst electrical stimulus of this and the posterior portion of the middle frontal convolution causes the eyes to open widely, pupils to dilate, and the head and eyes to turn to the opposite side (Ferrier). In the inferior portion of the third frontal convolution is a centre presiding over the movements of the lips and tongue in the monkey: it is commonly called Broca's convolution, as he was the first to ascribe to it the seat of the faculty of articulate language in man; Ferrier's centre for this comprises also the lower part of the ascending frontal (aphasic region). Broca assigned the cause of defects of speech (aphasia—i.e. inability to utter any proposition, although the mechanical articulation of mere words may not be lost, and the power of thinking may still be present), more especially to a lesion of this convolution on the left side; but Meynert and others have ascribed this aphasic condition to the convolutions of the island of Reil. All pathologists, however, agree that lesions on the left are far more prone to produce it than those on the right; when, however, the right has been the exceptional cause of aphasia, the patients have generally been left-handed. An exceedingly interesting point in the matter is that the subjects of aphasia have been capable of being taught again to speak, but only by beginning, much as a child, with the easiest monosyllables. The parietal lobe, which occupies the upper and back part of the cerebrum, is separated in front by the fissure of Rolando from the frontal lobe, and below in a very ill-defined manner by the external parieto-occipital fissure from the occipital lobe; the principal convolutions are the ascending parietal, which is the centre for prehensile movements of the fingers and wrist, and the postero-parietal lobule, in which is situated the centre for the movements of the leg and foot (Ferrier). Below these are the supra-marginal lobule and the gyrus angularis, which are the centre for vision. In the sphenoidal lobe, situated at the lower part of the cerebrum, bounded above by the fissure of Sylvius and divided by the parallel fissure, we have, in the upper portion, the superior temporo-sphenoidal convolution (infra-marginal), which is, according to Ferrier, the centre of hearing; complete destruction of these convolutions on both sides produced permanent deafness, but no impairment of vision or smell, or any defect of motion or sensation. Below this there are the second and third temporo-sphenoidal convolutions (middle and lower), extensive destruction of which produced no discoverable defect either as regards hearing, vision, tactile sensibility, or motor power. Destruction of the third temporo-sphenoidal (lower) and Hippocampal regions produced, however, total loss of tactile and muscular sensation (anæsthesia and analgesia) on the opposite side of the body, but no motor paralysis, loss of hearing or sight; and as the last experiment (Ferrier) on the middle and lower temporo-sphenoidal convolutions produced no defect of tactile sensation, it follows that the centre of tactile and muscular sense is situated in the Hippocampal region (Hippocampus and gyrus Hippocampi), and that lesion of this part is the essential factor in the production of anæsthesia, the lower temporo-sphenoidal convolution not entering into its material causation, as it was shown to be unaffected by removal. In the occipital lobe a transverse fissure divides it

into two parts; the greater part of both occipital lobes have been removed without producing any deficiency of vision or other defect; destruction of both occipital lobes and angular gyri caused complete blindness, atrophy of optic discs and fixity of pupils of the eye; there was, however, no loss of motor power or sensation in the limbs; complete destruction of both angular gyri caused for a time total blindness, followed by lasting impairment of vision in both eyes, whilst destruction of only the convex aspect of both caused bilateral visual defect of transient duration. It appears, therefore, that some amount of vision is possible with both eyes when only portions of the visual centres remain (Ferrier); but this is accounted for by the semi-decussations of the fibres of the optic tracts in the chiasma (discovered by Newton, 1704). Cases are on record in which one angular gyrus and one or both occipital lobes have been destroyed by disease without any disturbance of vision during life; complete destruction of both angular gyri and both occipital lobes have never been observed. Charcot has shown that intra-cerebral lesions of the posterior part of internal capsule produce crossed amblyopia; whereas disease of or pressure on the optic tracts alone, produces hemiopia. Professor Goltz, of Strasburg, exhibited a dog at the International Medical Congress, recently held in London, in which he had removed the motor centres on both sides without the production of hemiplegia; he argued from this that every portion of the cortex is in relation more or less with every function exercised by the hemispheres as a whole; but the post-mortem examination of this dog, which was afterwards made by a committee, consisting of Dr. Gowers, Dr. Klein, Dr. A. E. Schäfer, and Mr. J. Langley, showed that all the motor areas in the dog were not destroyed on either side, the grey matter of the anterior half of the injury being perfectly removed at the surface only on the left; and on the right a track of grey matter still remained at the lower part of the convolutions, although, generally speaking, only a very small amount of grey matter was left underlying the actual lesion. Professor Ferrier pointed out that the higher we go in the animal scale, the greater is the importance of the cerebral hemispheres in regard to manifestation; and that whereas in the frog, pigeon, and rabbit comparatively slight and transient effects followed, in the monkey and man similar lesions were succeeded by paralysis of a more permanent character. He exhibited a monkey in which, seven months before, the motor areas on the left side were destroyed, with the result of motor hemiplegia of the opposite side, temporary conjugate deviation of the head and eyes, partial facial paralysis and incomplete paralysis of the leg; that the hemiplegia was permanent was evidenced by the demonstration of secondary degeneration in the pyramidal tracts of the spinal cord; special senses were unaffected, and there was no impairment of sensation in the paralysed limbs. In the structure of the cerebral cortex (grey matter) the ganglionic nerve cells, usually described under the name of pyramidal cells, constitute the characteristic element of the region; they are elongated in shape, of very variable dimensions, and are arranged so that, in a vertical section, the smallest and most numerous are towards the surface of the cortex, those of average size

(larger pyramidal cells) in the middle, whilst the giant pyramidal cells are in the lowest zone. These giant cells, which have been carefully studied by Betz (of Kiev) and Mierzejewski, are met with in special and well-defined regions of the cortex, especially in the entire length of the anterior frontal and superior extremity of the anterior parietal convolutions and paracentral lobules—i.e., in Ferrier's motor centres for the extremities of monkeys; whilst Betz has observed these cells only to exist in the parts described by Hitzig and Fritsch as the motor centres of dogs, in newly-born puppies M. Soltmann remarked that stimulation of these regions produced no muscular movements in the corresponding limbs, although in nine or ten days these points became excitable: this indicates that the psychomotor centres are not pre-established, but undergo development with age, under the influence of functional activity; thus some explanation is afforded of the manner in which voluntary movements are reproduced in a limb after destruction of its motor centre, as it seems probable that the larger pyramidal cells may acquire development, and give rise to supplementary motor centres which replace the primitive centres destroyed by lesion. Recovery in a case of aphasia, in spite of a lesion in the convolution of Broca, is a typical instance of this phenomenon.

Braithwaite Steam Fire Engine. See FIRE EXTINCTION.

Bramah. See FIRE EXTINCTION.

Bramhill. See LAND QUESTION.

Bramwell, George William Wilahere **Bramwell, P.C.**, 1st Baron (creat. 1882); son of George Bramwell, Esq., banker; b. in London 1808. Called to the bar at Lincoln's Inn (1838); appointed a Queen's Counsel (July 1851); a Baron of the Exchequer (Jan. 1856); a judge of the High Court of Justice, Exchequer Division (1875); a Lord Justice of Appeal (1876), retired from the bench 1881.

Branecpeth, Baron. See BOYNE.

Branchiogastropoda. See ZOOLOGY.

Brand, Hon. Henry Robert, M.P., son of Viscount Hampden, late Speaker of the House of Commons, was b. 1841. Educated at Rugby. Retired as captain from the Coldstream Guards (1865). Is J.P. for Herts and Sussex. Surveyor-General of Ordnance (1884-85). Returned in the Liberal interest as M.P. for Hertfordshire (1864-74); Stroud (1874 and 1880-85); re-elected (1885).

Brandon, Duke of. See HAMILTON.

Brassey, Sir Thomas, M.P., M.A. (Oxon), K.C.B., was b. 1836. Educated at Rugby and Oxford. Called to the bar at Lincoln's Inn (1866). Deputy-Lieutenant and J.P. for Sussex, an Elder Brother of Trinity House, and an Associate of the Institute of Civil Engineers. Civil Lord of the Admiralty (1880); Secretary to the Admiralty (1884). Hon. Commander Royal Naval Artillery Volunteers (1880). Director of the London and North-Western Railway. Returned in the Liberal interest as member for Hastings (1868-85); re-elected 1885.

Braybrooke, Charles Cornwallis Neville, 5th Baron (creat. 1788); b. 1823, and succeeded his brother 1861.

Braye, Alfred Thomas Townshend Verne-Cave, 5th Baron (creat. 1529); b. 1849, and succeeded his mother in 1879. Sir Reginald Braye, K.G., was Prime Minister to Henry VII.

Brazil. An empire, under the Emperor Pedro II., of the house of Braganza. By the constitution of 1824 the executive power in imperial affairs is confided to the Emperor, and the legislative to a Senate and House of Deputies. Senators are chosen for life by the Emperor, each from one of three candidates nominated by the people; the deputies are elected directly for four years. The Chamber has the initiative in taxation, and in the choice of the sovereign if necessary. Provincial affairs are dealt with in the provincial assemblies. State religion is Roman Catholic, but all others are tolerated. Education not in a very forward state, 84 per cent. of population being illiterate. Area 3,275,326 square miles. Pop. about 10,000,000. Revenue, 1885, about £13,168,000; expenditure about £12,855,000; debt about £80,500,000, not inclusive of the debt of the provinces. There is also an irredeemable paper currency to the nominal value of about £20,000,000. Since the close of the war with Paraguay, in 1870, little remains to note, with the exception of the slavery question. In 1867 it was decreed that slavery should cease in twenty years, and that all children of slaves born after that year, and all slaves who were soldiers, should be at once free; and in 1871 the Rio Branco Law made further provision for gradual emancipation. Since the latter date 90,000 have been emancipated by private generosity and 19,000 by the above law; and in 1881 the province of Ceara freed all its slaves, 30,000 in number. There are still, however, 1,500,000 blacks in servitude, and the problem how to abolish the peculiar institution without producing commercial ruin produced in 1884 a severe ministerial crisis, owing to the interested opposition of the planters.

Breach of Promise of Marriage. Mutual promises to marry form a binding contract. Such a promise by the man is impliedly conditional upon the chastity of the woman. A promise by a man already married will give ground for claiming damages. If the contract do not fix any date for the marriage the law will presume that it was to take place within a reasonable time. If one of the contracting parties marry a third person, and thus render performance impossible, he or she may be sued at once, and that although the third person has died in the meantime. A refusal to perform the contract has the same effect although a reasonable time may not have elapsed. The contract may be rescinded by mutual agreement, and is discharged by the death but not by the physical incapacity of either party. In assessing damages for breach of a contract to marry, not only the actual loss sustained but also the injury done to the feelings may be taken into account. (See Leake, "Law of Contract.")

Breadalbane, Gavin Campbell, P.C., 1st Marquis of (creat. 1885); Earl of Breadalbane (1677); b. 1851, and succeeded his father in the Scottish honours 1871. Was a Treasurer of the Queen's Household (May 1880 to June 1885). The present peer established his right before the House of Lords (1872) to succeed his father as legitimate heir under the Scotch marriage law.

"Breitmann, Hans." See NOMS DE PLUME. **Brewers The Worshipful Company of.** See CITY GUILDS, THE.

Bridgeman, Lieutenant-Colonel the Hon. Francis Charles, M.P., second son of the Earl

of Bradford, was b. in London 1846. Educated at Harrow. Joined the Scots Greys (1865). Attached to Lord Rosslyn's Special Embassy to Madrid (1870). Distinguished himself in the late Soudan war. Returned in the Conservative interest as member for Bolton (1885).

Bridgewater Treatises. The Right Hon. and Rev. Francis H. Egerton's will bequeathed the sum of £8,000 to be paid to the person or persons appointed by the President of the Royal Society to write a treatise on "The Power, Wisdom, and Goodness of God, as manifested in the Creation." Eight books were prepared and published (1833-36); they were by Rev. T. Chalmers, D.D., J. Kidd, M.D., Rev. W. Whewell, Sir C. Bell, P. M. Roget, M.D., Rev. W. Buckland, D.D., Rev. W. Kirby, and W. Prout, M.D. They have frequently been reprinted.

Bridport, Alexander Nelson Hood, K.C.B., 1st Visct. (creat. 1868), was b. 1814. Lieutenant-general and late lieutenant-colonel Scots Fusilier Guards.

Bright, The Rt. Hon. John, P.C., M.P., was b. 1811. Engaged in business as a manufacturer at Rochdale. He was President of the Board of Trade (1868-70); Chancellor of the Duchy of Lancaster (1873-74 and 1880-82). Created a member of the Privy Council (1868). Returned in the Liberal interest as member for Durham (1843-47); Manchester (1847-57); Birmingham (1857-85); re-elected for Central Birmingham (1885). Mr. Bright has been a leading member of the Radical school for many years, and has been closely identified with the Birmingham School of Politics (*q.v.*). He is a strenuous advocate of Free Trade, Reform, and, as member of the Society of Friends, of Non-intervention.

Bright, Mr. W. Leatham, M.P., was b. 1851. He is the second son of Rt. Hon. John Bright. Educated at the Lancaster Friends' School, Grove House, Tottenham, and London Univ. Returned in the Liberal interest as member for Stoke-on-Trent (1885).

Brighton Cup and Stakes. See RACING.

Brighton Week. See RACING.

Brilliant Sunsets. See KRAKATOA.

Brinsmead Symphony Concerts. See MUSIC FOR 1885.

Brinton, Mr. John, M.P., was b. 1827. He is head of the firm of John Brinton and Co., carpet manufacturers, Kidderminster; Chairman of the Carpet Manufacturers' Association. J.P. for Worcestershire and the borough of Kidderminster. Returned in the Liberal interest as member for Kidderminster (1880-85); re-elected 1885.

Brisbane. See QUEENSLAND.

Brisson, Henri, was the President of the French Chamber of Deputies when the Ferry Ministry was overthrown (by 308 to 161 votes) on March 30th, 1885. News of the defeat of General Négrier, at Lang Son, reached Paris on the previous day, or rather was made known on that day, and the disgrace of the Ferry Government was directly attributed to the Tonquin question. After unsuccessful attempts had been made by MM. Constans and De Freycinet to form a cabinet, M. Brisson resigned his presidency, and successfully undertook the task (April 6th), when, although ostensibly Republican as the former Ministry, not one of the old members was returned, but M. de Freycinet accepted the portfolio of Foreign Affairs. M. Floquet (Radical) was appointed President of the Chamber. On

April 7th a Tonquin credit of £6,000,000 was obtained by 373 votes to 92; on June 4th the proposed impeachment of the Ferry cabinet was rejected by 322 to 153; and on June 9th a treaty of peace was signed between France and China, France giving up Ke Lung and the Pescadores, but retaining Annam and Tonquin there was, however, no indemnity. This treaty was approved by the Senate on July 17th. In October the general election took place, the result, 391 Republicans and 205 Reactionists, showing a large increase in the latter (the old Chamber consisted of 462 Republicans and 95 Reactionists). On the assembling of the new Chamber, November 10th, a scene arose on the Tonquin question with respect to alleged military mismanagement; and on the 14th M. Brisson's statement did not appear to have any effect in allaying the excitement. At the conclusion of the debate, December 26th, the Government only had a majority of 4 votes, and a crisis at once became apparent. On December 28th, M. Jules Grévy was re-elected President of the French Republic, and on the same day the Premier, M. Brisson, announced that the diplomatic relations between Egypt and France were considered to be interrupted at Cairo. It was stated that the French diplomatic agent had been instructed to leave for Alexandria on the following day, in event of the note forwarded to the Egyptian Government not eliciting a favourable reply, and to tender his resignation. On the 29th M. de Freycinet was again requested to form a cabinet, and virtually the Brisson Government ceased to exist with 1885, after a short term of office extending over barely nine months. On January 7th, 1886, President Grévy signed the decrees for the appointment of the new Ministry. From the character of the criticisms on the last development of French Government, appearing in the Paris newspapers at the time of M. de Freycinet's assumption of the Premiership, it has been suggested that M. Brisson looked for the reversion of the Presidency of the Republic; the ex-Premier in the *Lanterne* for his part accused M. de Freycinet of disloyalty to the Cabinet, and said he left the office to be taken up by the then Minister of Foreign Affairs.

Bristol, Frederick William John Hervey, 3rd Marq. of Creat. 1826; Earl of Bristol (1714) b. 1834, and succeeded his father 1864. M.P. for West Suffolk (May 1859 to Nov. 1864). Lord Lieutenant of Suffolk (1886). Amongst his ancestors were William, Lord Hervey, who distinguished himself in the conflict with the Spanish Armada; John Lord Hervey, Keeper of the Privy Seal (1740); and the 3rd Earl of Bristol, Vice-Admiral of the Blue.

Bristowe, Mr. Thomas Lynn, M.P., was b. 1833. Connected with the firm of Bristowe Brothers, of the Stock Exchange. For many years Captain 1st Surrey Rifles. Returned in the Conservative interest as member for Norwood (1885).

British Coaling Stations. To a country like Britain the importance of having various convenient points throughout the world at which both her navy and her mercantile marine may obtain supplies of coal cannot be overestimated, especially in the event of hostilities breaking out. As steam navigation has advanced, the Government have organised in our own possessions coaling stations, where it has been conceived that they would be most

useful; but, oddly enough, those places have been allowed to remain in a comparatively defenceless state. Operations are now in progress, however, which will remove this reproach. A Royal Commission appointed to inquire into the defence of British possessions and commerce abroad tendered its report in July 1882, and the Inspector-General of Fortifications was instructed to draw up a scheme based on the report. By March 1884 this scheme had been prepared and approved of by the War Office authorities. Some discussion subsequently took place with regard to details. The following is a list of the stations to be fortified, and the amounts to be spent:—**Aden**—works £94,300, armaments £60,500; **Ceylon (Trincomalee)**—works £25,000, armaments £37,800; **Singapore**—works £75,000, armaments £83,700; **Hong Kong**—works £55,625, armaments £79,500; **Cape (Simon's Bay)**—works £60,000, armaments £44,700; **Sierra Leone**—works £30,000, armaments £35,700; **St. Helena**—works £7,000, armaments nil; **Mauritius**—works £55,000, armaments £29,400; **Jamaica**—works £31,250, armaments £47,400; **St. Lucia**—works £30,000, armaments £27,600: total for works, £463,175, and for armaments, £446,300. Of these amounts it was arranged that of the works £230,400 should be charged to the imperial account, and £232,775 to the colonial account; and of the armaments account, £416,050 to the imperial account, and £30,250 to the colonial account. In the course of a discussion on the army estimates, in July 1885, the Secretary of State for War announced that certain charges were for guns to be used in the fortifications of the coaling stations, and that works of defence had already been begun at the more important stations. He added that every effort would be made to complete the work by the time specified at the outset,—namely, the 31st of March, 1888.

British Dairy Farmers' Association. See DAIRY FARMING.

British Dependencies. See BRITISH EMPIRE, COLONIES, ETC. (APPENDIX).

British Empire, Colonies, Dependencies, and Protectorates. We furnish a table of the British empire throughout the world, showing the geographical distribution of the various parts of it, their respective capitals, area, population, public revenues and expenditure, imports and exports, the dates at which they were acquired, and their political status and government. The dependencies are classified thus:—(a) Colonies possessing a full constitution, with responsible government; (b) colonies in which the legislature is partly elective and partly controlled by the governor, styled representative government; (c) Crown colonies, which are ruled directly by the Imperial government, through their respective governors and local officials; (d) dependencies subordinate to the government of others, provinces and parts of colonies, administered by functionaries appointed by the governments on which they are dependent; (e) protectorates, internally independent, but more or less subject to British control, by treaty and otherwise; (f) places nominally belonging to Great Britain, but either unoccupied or not under authority. Territories occupied by troops, but not declared to be actually British possessions (e.g., Egypt, Suakim), have not been included in this table. Details of the more important dependencies will be found under their respective

headings elsewhere. Approximate total figures of the entire empire, at home and abroad, are estimated to be:—area, 9,000,000 sq. miles; pop. 316,000,000; revenue, £210,000,000; public debt, £1,090,000,000; imports and exports, £1,076,000,000. (See APPENDIX for Classified List.)

British Navy. See NAVY, THE BRITISH.
British Protectorates. See BRITISH EMPIRE, COLONIES, ETC. (APPENDIX).

"British Quarterly Review." Founded by the Rev. Dr. Robert Vaughan, President of Lancashire Independent College, for the vindication of the principles of civil and religious liberty, with which the name of English Congregationalism had always been associated. It is not a theological or ecclesiastical journal, but seeks to inculcate principles of freedom and of faith in all departments of human life, and to imbue all its expositions of politics, philosophy, literature, and theology, with that spirit. The first number was published in February 1845, Dr. Vaughan being its editor until 1865, when Dr. Henry Allen and Dr. Henry Reynolds became its joint editors. Since 1873 it has been under Dr. Allen's sole editorship.

Briton Life Office, The. See FIRE AND LIFE INSURANCE.

Briton Medical and General, The. See FIRE AND LIFE INSURANCE.

Broad Church. See ESTABLISHED CHURCH.

Broadhurst, Mr. Henry, M.P. The son of a journeyman stonemason, b. 1840 at Littlemore, Oxfordshire. He married 1860. He embraced the occupation of his father, and continued to work at his trade until 1872, when he occupied a somewhat prominent position in the London masons' lock-out. In the same year being elected a member of the parliamentary committee of the Trades' Union Congress, he laid aside his chisel and hammer for life, and devoted himself chiefly to political work. In 1878 he was elected secretary of the parliamentary committee, which post he retained until he took office. For many years Mr. Broadhurst has taken a leading part in the various movements affecting the condition of the working classes, and was elected to represent Stoke-upon-Trent in the general election (1880). Elected for Bordesley Division, Birmingham (1885); Under-Secretary to the Home Office (Feb. 1886).

Brocklehurst, Mr. William Coare, M.P., was b. 1818. He succeeded his father the late Mr. John Brocklehurst as member (Liberal) for Macclesfield (1868-80). Returned for the same borough at the recent election (1885). Mr. Brocklehurst is J.P. for Cheshire, and was formerly a captain in the Earl of Chester's Yeomanry.

Brooklesby Stakes. See RACING.

Broderers, The Worshipful Company of. See CITY GUILDS, THE.

Brodrick, Baron. See MIDDLETON.

Brodrick, The Hon. William St. John Fremantle, M.P., eldest son of Viscount Middleton, was b. 1856. Educated at Eton and Balliol Coll., Oxford. Late lieutenant in the Surrey Militia. He served on the recent Royal Commission on Irish Prisons. Returned in the Conservative interest as member for South-West Surrey (1885).

Brokers (London) Relief Act, 1884. This Act provides that after the 29th September, 1886, "it shall no longer be necessary for any person wishing to carry on the business of a

broker in the city of London or the liberties thereof to be admitted by the Court of the Lord Mayor and Aldermen, or to pay yearly or otherwise any sum or sums of money to the Chamberlain of the City of London. The necessity of such admission and payments had been created by two Acts of Parliament, the one of the 6th year of Anne, and the other of the 57th year of George III.

"Brooke, Nelsie." See NOMS DE PLUME.

Brooke, Rev. A. Stopford, M.A., was b. 1832. Educated at Trin. Coll., Dublin, where he graduated (1856), winning the Downe Prize and Vice-Chancellor's medal for English verse. Minister of Bedford Chapel, Bloomsbury (1876), where he now officiates. Chaplain to the Queen (1872). In 1880 Mr. Brooke seceded from the Establishment, in consequence of his not holding the orthodox views on miracles. Is the author of several works, among which are "Life and Letters of the late F. W. Robertson," "Primer of English Literature," and several volumes of sermons.

Brooks, Sir W. Cunliffe, M.P., was b. 1819. Educated at Rugby and St. John's Coll., Camb. Called to the bar at the Inner Temple (1847); relinquished practice on the death of his grandfather, when he became a partner in the banking firm. Created a baronet by the Salisbury administration (1886). Returned in the Conservative interest as member for East Cheshire (1869-85), Altrincham (March 26th, 1886).

Brook Farm. See CO-OPERATIVE (APARTMENT) HOMES.

Brookfield, Lieut.-Col. Arthur Montague, M.P., son of the Rev. Canon Brookfield, Chaplain to the Queen, was b. 1853. Educated at Rugby and Jesus Coll., Cambridge. He entered the 13th Hussars (1872); retired 1880. Returned in the Conservative interest as member for East Sussex (1885).

Brooks, Mr. John, M.P., was b. 1856. Educated at Harrow. Graduated with high honours (History and Political Economy)—Newdigate prizeman (1877) at Merton College, Oxford. Mr. Brooks, who was J.P. for Cheshire and Berkshire, was returned in the Conservative interest (1885) as member for the Altrincham Division of Cheshire. Died March 1886.

Brotherhood, The Pre-Raphaelite. See PRE-RAPHAELITE.

Brougham and Vaux. 3rd Baron (creat. 1860); b. 1836. The famous Lord Brougham was the 1st Baron.

Broughton, Rhoda, a native of North Wales, has achieved notice as a clever novelist. Her first work, "Cometh up as a Flower" which was published about twenty years ago, at once made her name; and was closely followed by "Not Wisely but too Well," "Red as a Rose is She"; and these, with a later novel "Joan," are generally considered to be the best of the nine or ten volumes she has published.

Brown, Mr. Alexander Hargreaves, M.P., was b. 1844. He is J.P. for the county of Lancaster. Lieut.-col. 1st Lancashire Artillery Volunteers. Late 5th Dragoon Guards. Returned in the Liberal interest as member for Wenlock (1868-85); Mid-Shropshire (1885).

"Brown, Tom." See NOMS DE PLUME.

Browning, Robert, poet and "writer of plays," was b. 1812. Educated at Univ. Coll. (then London University). His first poem, "Pauline" (1833), was written at the age of twenty, but attracted no special attention at the time; though some readers, among them

Rossetti, were much struck by its many beauties and originality. In 1834 Browning visited St. Petersburg, and spent many months in Italy studying Italian art and life. In 1835 "Parsifal" appeared; and Macready having accidentally suggested the writing of a play "Strafford" was written, and produced at Covent Garden in 1837, Macready and Helen Faucit playing the chief parts. This was followed (1840) by "Sordello," together with the series called "Bells and Pomegranates," including "Pippa Passes," "King Victor and King Charles," "Dramatic Lyrics," "The Return of the Druses," "A Blot on the Scutcheon," "Colombe's Birthday," "Dramatic Romances," "Luria," and "A Soul's Tragedy" (1841-46). Between 1846 and 1868 Mr. Browning published many of his greatest works: "Men and Women," "Christmas Eve and Easter Day," "Dramatis Personæ," and many shorter poems. In 1868-69 appeared the "Ring and the Book," generally looked upon as Browning's greatest work. His best known poems are "Balaustion's Adventure" (1871), "Fifine at the Fair" (1872), "Red-cotton Nightcap Country" (1873), "Fun Album" (1875), "Pacehiarotto" (1876), "La Saisiaz" (1878), "Dramatic Idylls" (1879-80), "Jocoseria" (1883), "Dramatic Poems" (1884). A complete list of Browning's works has been issued by the **Browning Society** instituted (1881) for the study of the works of the poet. Among its vice-presidents are Sir F. Leighton and Mr. Henry Irving. O. Browning's plays, "Colombe's Birthday," "The Blot on the Scutcheon," and "Strafford," have been performed. The honorary degree of D.C.L. was conferred upon him by Oxford University (1882). Mr. Browning married (1846) the poetess Elizabeth Barrett, who died 1861.

Brownlow, Adelbert Wellington Brownlow Cust, 3rd Earl (creat. 1815); Baron Brownlow, 1776; b. 1844, and succeeded his brother 1867; an Ecclesiastical Commissioner for England; was M.P. for North Shropshire (Aug. 1866 till Feb. 1867); Parliamentary Sec. to the Local Govt. Board since June 1885 to Jan. 1886; assumed the name of Cust by royal licence (1863). The father of the 1st Baron was Speaker of the House of Commons (1761-70).

"Brownrigg, Henry." See NOMS DE PLUME.

Bruce, The Hon. Robert Preston, M.P., of Broom Hall, Dumfries, second son of the eighth Earl of Elgin, was b. at Quebec, 1851. Educated at Eton and Balliol Coll., Oxford. Called to the bar (1879). Late capt. Fife Artillery Militia. Deputy Lieutenant and J.P. for Fifeshire. Returned in the Liberal interest as member for Fifeshire (1880-85); re-elected 1885.

Brunner, Mr. John Tomlinson, M.P., the son of a citizen of Zurich, who settled in this country at Liverpool. Mr. Brunner, b. 1824, entered mercantile life (1857), and became the proprietor of the large alkali works at Northwich. Mr. Brunner, who is a J.P. for Cheshire, has contributed generously to the various educational objects of the district, and recently (July 1885) presented a free public library to Northwich. He was returned for the Northwich Division of Cheshire at the last election in the Liberal interest.

"Brush" Company, The. See DYNAMO.

Bryce, Mr. James, M.P., B.A. (Oxon.) was b. 1838. Educated at the University of Edinburgh, and Trin. Coll., Oxford, where (1862) he graduated B.A. (double first class). Called to the bar at Lincoln's Inn (1867). Has

been since 1870 Regius Professor of Civil Law, Oxford. He is Professor of Roman Law at the Inns of Court. Returned in the Liberal interest as member for Tower Hamlets (1880-85); South Aberdeen (1885). Under Secretary for Foreign Affairs (Feb. 1886).

Buccaneers, a term metaphorically applied to denote freebooters, from the piratical adventurers of the sixteenth and seventeenth centuries. They were principally English and French, and originally endeavoured to obtain a part of the rich American trade which Spain had opened up. Later on they degenerated into mere pirates, and gradually lost power, disappearing at the close of the seventeenth century.

Bucleuch, William Henry Walter Montagu-Douglas-Scott, 6th Duke of (creat. 1863); Earl of Doncaster and Baron Tynedale, (1862), by which last two titles he sits in the House of Lords; b. 1831, and succeeded his father in 1884. Was M.P. for Midlothian (1874-1880). In the male line the Duke represents James, Duke of Monmouth (the illegitimate son of Charles II. by Lucy Walters).

Buchanan, Mr. Thomas Ryburn, M.P. was b. in Glasgow 1846. Educated at Balliol Coll., Oxford. Elected Fellow of All Souls' College (1871). Called to the bar at the Inner Temple (1873). Returned in the Liberal interest as member for Western Division of Edinburgh (1881-83); re-elected 1885.

Bucher, Lothar, Prussian Councillor of Legation, was b. 1817. Member of the National Assembly at Berlin (1848). Journalist at London (1850-59). Was appointed by Prince Bismarck (1864) as his secretary in the Ministry for Foreign Affairs, which post he occupies at the present time (1886), and is considered to be the right hand of Bismarck.

Buckingham and Chandos, Richard Plantagenet Campbell Temple-Nugent-Brydges-Chandos-Grenville, P.C., 3rd Duke of (creat. 1822); Marq. of Buckingham, 1784; b. 1822, and succeeded his father in 1861. Was a Lord of the Treasury (Feb. to Dec. 1852); Lord President of the Council (June 1866 to March 1867), and Secretary of State for the Colonies from the last date to Dec. 1868; was Keeper of the Privy Seal to the Prince of Wales (March 1852-59); and Governor of Madras (1875-80); a special Deputy Warden of the Stannaries (Oct. 1852). This family numbers among its connections, George Grenville, a distinguished statesman temp. George II. and III.; William Wyndham, Lord Grenville, who was First Lord of the Treasury in 1806; and the 1st Earl of Temple, an eminent statesman in George III.'s reign. This family does not derive its title from the Duke of Buckingham of Charles I.'s time, who was assassinated by Felton in 1628.

Buckinghamshire, Sidney Carr Hobart-Hampden, 7th Earl of (creat. 1746); b. 1860; succeeded his grandfather 1885.

Buckle, Mr. See DEMOCRACY.

Buckle, Mr. Abel, M.P., Moss Lodge, Ashton-under-Lyne, b. 1835. Educated at Owens Coll., Manchester. Chairman of the Manchester and Liverpool Dist. Banking Co.; and J.P. for Lancashire, Cheshire, and Ashton-under-Lyne. Returned in the Liberal interest as member for Prestwich Div., South-East Lancashire (1885).

Budge, Mr. J. S. See EGYPTOLOGY.

Building Societies. These societies are generally considered to be a convenient and fairly safe means of encouraging thrift in the

middle and working classes. Broadly, they may be divided into two sections—the Proprietary and the Mutual Societies: the former for securing land or houses and lending money thereon; the latter for similar purposes, the whole of the profits being divided amongst the members *pro rata*. Some are permanent, and others terminable. A favourite development of the latter is the **Star-Bowkett**—named after the founders of the system—a society which allots its capital among the members, according to the number of shares they nominally hold, by ballot. The subscriptions, generally a small sum per share, are paid weekly or monthly; and on securing an "appropriation" the member repays this sum very much as he would pay his rent, over a term of ten or twelve-and-a-half years, at the end of which the house or land becomes his own. He also maintains his small subscription, and at the winding-up of the society he is entitled to a share of the profits. A further development of the ballot system is the arrangement by which the member may sell his appropriation and his subscription book, thus realising an immediate premium. According to the annual official return up to Dec. 1884, and issued in July 1885, there were in the United Kingdom 2,134 societies, and 61 dissolutions in the year; in the 1,677 societies making returns there were 544,526 members, showing an average of 327; the receipts in 1,910 societies amounted to £22,106,829, an average of £11,574; in 1,919 societies the liabilities to shareholders reached £33,604,840, and to depositors £16,349,347; in 1,446 societies the balance of unappropriated profit was £1,778,422; the balance deficit in 396 societies was £131,551; the balance due on mortgage securities was £48,441,837; other securities and cash £3,132,247.

Bulgaria. Principality, under Alexander I. of Battenberg, was, by Treaty of Berlin, 1878, constituted an autonomous and tributary principality under the suzerainty of the Porte, the executive power being vested in the prince, assisted by council of ministers, and the legislative power in a single chamber, the National Assembly, elected for three years by manhood suffrage in the proportion of one member to every 10,000 of population. In 1883 a second chamber was formed, and it was enacted that every law must be examined and voted by both chambers and sanctioned by the prince. By the treaty the amount of tribute and the share of the Turkish debt to be assumed by Bulgaria is to be fixed by agreement between the Powers; but no amount has been yet determined. Area, 24,360 square miles; pop. in 1881 about 2,000,000. Army, in peace about 17,000, in war about 52,000; navy, 11 small steamers and transports. The first assembly was opened in Feb. 1879, and in April following the present ruler was elected. In May 1881 the prince proposed to abdicate unless invested with extraordinary powers. A new assembly met in July, and accepted the proposal; the Liberal ministers, Zancoff and Hamekoff, against whom the movement of the prince was partly directed, were arrested, but soon afterwards set at liberty, and a practical dictatorship was established, and the administration, especially the army, was largely Russified; but early in 1883 a strong anti-Russian feeling, arising originally in Eastern Roumelia, spread to Bulgaria, resulted in the meeting of the Assembly, the installation of a Liberal cabinet under Zancoff, the adoption of

a new constitution, and the overthrow of Russian influence. Some disputes with Servia as to the boundary took place at the end of 1884. On September 18th, 1885, a national rising took place in Eastern Roumelia, and the Turkish governor was expelled, and Prince Alexander of Bulgaria put himself at the head of the insurrection, and on the 20th issued a proclamation announcing the union of Eastern Roumelia with Bulgaria, occupied the territory, and placed the national forces of both districts on a war footing. Servia and Greece at once mobilised their forces also, and announced to the Powers that any disturbance of the balance of power in the Balkan peninsula caused by the union of the two Bulgarias could only be compensated by an increase in their respective territories. Servia demanded the cession of Widin by Bulgaria, quarrels ensued between the troops on the frontier, and war was declared by Servia against Bulgaria (for details of which see article on SERVIA). In consequence of the failure of the Servians, an armistice was agreed to, and it is probable that a permanent peace will, at the instance of the Powers, be concluded. A Conference of Ambassadors was held in the meantime at Constantinople, the majority of whom at first advocated a return to the *status quo*; but the union of the two provinces has been confirmed by the Powers. A scheme dealing with the Bulgarian debt was presented to the Porte in December, pointing out that the principality had not paid any part of the tribute due, nor of the share of the Ottoman debt allotted to it under the Berlin treaty.—1886. Peace concluded with Servia (March 3rd), and ratified by the parties and the Porte on the 13th, appointing Prince Alexander Governor-General of Eastern Roumelia under the title of Iskender Pasha for a term of five years, to be re-nominated at the end of that time by sanction of the Powers under the Berlin Treaty, Bulgaria agreeing to assist the Porte with troops if attacked, and to assume a portion of the Turkish state debt, Russia insisting that the re-nomination should be an essential point in the arrangement. Prince Alexander (March 17th) refused to be nominated on these conditions, and a dead-lock ensued, which (March 31st), still continues, the Tsar and Prince Alexander having respectively declined to yield on the point at issue.

Bullard, Mr. Harry, M.P., of Helleston House, Norwich, was b. 1841. Educated at East Dereham, Norfolk. Connected with firm of Bullard and Sons, of the Anchor Brewery, Norwich. Sheriff of Norwich (1877); Mayor (1879-80). Returned in the Conservative interest as member for Norwich (1885). Unseated on petition (March 27th, 1886).

Bundesrath. See GERMANY and GERMAN POLITICAL PARTIES.

Bunsen, Baron. See EGYPTOLOGY.

Burdett-Coutts, Mr. William Lehmann Ashmead Bartlett, M.P., of Holly Lodge, Highgate, and Stratton Street, Piccadilly, was b. in the United States. Educated at Cholmeley School, Highgate, and Keble Coll., Oxford. Acted as special commissioner to the Baroness Burdett-Coutts' Turkish Compassionate Fund. He married the Baroness, whose name he assumed (1881). Returned in the Conservative interest as member for Westminster (1885).

Burghley, Lord, M.P., eldest son of the third Marquis of Exeter, was b. 1849. Edu-

cated at Eton. Late capt. Grenadier Guards. Served as A.D.C. to General Sir Chas. H. Doyle, at Portsmouth. Is major Northamptonshire and Rutland Militia. J.P. for Lincolnshire, Rutlandshire, and Northamptonshire, and Deputy Lieutenant for Lincolnshire. Returned in the Conservative interest as member for Northamptonshire (1877-85); re-elected for Northern Division (1885).

Burial Laws Amendment Act, 1880. This Act put an end to a tedious and bitter contest between the Established Church and other religious bodies. It provides that any one responsible for the burial of a deceased person may give forty-eight hours' notice in writing, and in the form prescribed in the first schedule to the Act, to the incumbent of any place or his substitute, that it is intended to bury the deceased in the churchyard of such place without the rites of the Church of England, and that the incumbent or his substitute shall then be free to permit such burial. The burial shall take place in accordance with such notice, and the public are to have free access to such burial, which may be carried out either with the service of any Christian Church or without any service. But the proceedings are not to be made the occasion of bringing into contempt any church or denomination. Ministers of the Church of England are empowered to use the burial service of the Church of England at a burial in unconsecrated ground. In cases where that burial service is not allowed to be used, or when requested so to do by the person responsible for the burial of the deceased, they are empowered to use such service, consisting of prayers taken from the Book of Common Prayer and portions of Scripture, as may be approved of by the Ordinary. The Act extends to the Channel Islands, but not to Scotland or Ireland.

Burleigh. See LAND QUESTION, THE.

Burmah comprises a vast tract of country in southern Asia, bounded on the north and west by the mountainous ranges of Thibet, Assam, and Manipur, on the east by Chinese territory, and partly on the south-east by Siam. The whole of the southern and part of the south-eastern sides form the Burmese shores of the Bay of Bengal. There are three great tribal families in the country, the chief of which is the Mran-má (from which the word Burmah is derived); and while distinct from the Aryans in India and the Chinese on the other side, the natives, to some extent, partake of the peculiarities of both. The origin and early history of the people are lost in obscurity, but the country is covered with the traces of a past civilisation, and it is known that from remote times the land has been the scene of prolonged internecine warfare, and at least two Chinese invasions. The country is fertile, especially in the valley of the great river Irrawaddy, which is navigable for river boats for six hundred miles from the Bay of Bengal; and many valuable minerals are found, including the rubies which excited the cupidity of early navigators, and a good supply of petroleum. Buddhism is the religion of the people, and in Burmah it is of a peculiar type, which allows perfect tolerance to all other creeds, but prevents proselytism. Every boy enters a temple or pagoda at an early age, and being taught to read and write, develops into a bonze or monk (see BONZE), but he can leave or stay as he thinks fit. The country is covered with these temples, which,

with the clergy, are all supported voluntarily. The position of the Burmese women will compare favourably with any other Eastern nation. Owing chiefly to troubles on the Indian frontier, the British declared war with Burmah in March 1824, and the operations were continued under Sir A. Campbell till 1826, in the February of which year a treaty was signed at Yendabu, by which certain territory, including Aracan and Tenasserim on the coast, was ceded to the British. In 1831 the second war broke out, through the maltreatment of an English ship-owner, but was of brief duration. The principal port, Rangoon, fell into General Godwin's hands in April 1852, when peace was declared. The British possessions were extended to include the whole of Pegu, and from that time an imaginary frontier line was drawn through the middle of the country. The upper portion, or Independent Burmah, including the Shan States, comprised about 192,000 square miles, and a population of some 4,000,000; the lower, or British Burmah, 88,556 square miles in extent, with a population, in 1881, of upwards of 3,800,000. From the annual report for the years 1884-85 the value of the inland trade is shown to have exceeded by £200,000 that of 1883-84, the bulk of the trade being carried by the Irrawaddy river between Lower Burmah and Mandalay and Bhamo. From Upper Burmah imports valued at £1,708,716 were received by the same route (1884-85). The exports to Upper Burmah were generally in excess of the previous period (1883-84). The Rangoon State Railway (commenced 1881) is at present open as far as Toungoo, a distance of 166 miles. The seat of government in Independent Burmah is Mandalay, which was built in 1822, and the monarchy was absolute. The third and last war with the Burmese broke out in consequence, it is believed, of French intrigues. During the past-autumn (1885) King Thee Baw suddenly required the Bombay and Burmah Trading Company, who had the concession of the teak forests, to pay a further fine of twenty-three lakhs (see LAKH) of rupees, the British envoy and consul having some time before left the city, owing to the arrogance of the Court. This led to an ultimatum from the British, and preparations for war. The king answered in a manner more or less insolent and evasive, and then issued a proclamation calling upon his people to repel the English invaders. Early in November General Prendergast (*q.v.*) proceeded from Rangoon up the river Irrawaddy with a force of about 15,000 men, and after a very feeble resistance entered Mandalay on the 28th of the same month, sending Thee Baw a prisoner to Rangoon.—1886, Jan. 1st. Upper Burmah was annexed to the British Empire by proclamation of the Viceroy of India. War with the insurgents. Death of Mr. St. Barbe, the Chief Commissioner. 21st. Official correspondence from the accession of King Thee Baw to the date of annexation (1878 to Jan. 1st, 1886) issued by Secretary of State for India. Feb.—Visit of Lord Dufferin, the Viceroy of India. 22nd. Annexation confirmed by vote of Parliament. March 6th. Proclamation issued under the order of the Viceroy of India announcing to the Burmese the annexation of Upper Burmah, and the placing of it under British rule. 13th. Mr. Barnard arrived at Mandalay and assumed the government. 26th. Parliamentary papers issued respecting the military executions which took place early in

the year (1886), and Dacoity. 27th. Successful engagement by the force under Col. Le Mesurier with the insurgents. 29th. King Thee Baw left Madras for Ratnagiri 31st. Lieut. General Prendergast vacated his command, and was succeeded by Major-General White. In future the Lower Province will be military, subordinate to Madras, and the Viceroy is in communication with the Secretary of State in Council as to placing the whole of Burmah under the Commander-in-Chief in India. [See Balfour's "Cyclopædia of India," Hunter's "Imperial Gazetteer of India (Rangoon)," "Encyclopædia Britannica (Burmah)"; also Colquhoun's "Burma and the Burmans," Yule's "Embassy to Ava," etc., etc.]

Burnaby, Lieut.-Col. Frederick Gustavus, b. 1824. Educated at Harrow. Entered the Royal Horse Guards: cornet (1859); Lieutenant (1861); Captain (1866); Major and Lieut.-Col. (1880); Lieut.-Col. (1881). Renowned for his famous ride to Khiva (1875), which the suspicions of the Russian authorities frustrated, and he was recalled by a telegram from the Duke of Cambridge, who ordered his immediate return to England. In the year 1876 he rode through Asiatic Turkey and Persia, returning to Constantinople *via* the southern shore of the Black Sea. A narrative of the journey, "On Horseback through Asia Minor," was published 1877. Was the military correspondent of *The Times* with the army of Don Carlos. Was Conservative candidate for Birmingham (1880). Notwithstanding his want of success, he at the time of his death, in conjunction with Lord Randolph Churchill, were the recognised candidates in the Conservative interest for that borough. Was attached to the Intelligence Department in Egypt under Sir Gerald Graham (1884), and was present at the battle of El Teb, where he was severely wounded, mentioned in despatches, and gained the Khedive's medal. When the further operations were begun he again sought and obtained active service, and leaving Korti in charge of a convoy of grain he pushed on with the utmost rapidity, his object being to join General Stewart at Gakdul. He reached this place on the 13th, before General Stewart started for Metammeh. Was killed at the battle of Abu Klea (Jan. 17th, 1885).

Burnand, Mr. F. C., the editor of *Punch*, was b. 1837. Educated at Eton and Trin. Coll., Cambridge. Called to the bar (1882). Has been a voluminous dramatic writer, principally devoting himself to burlesque. Is the author of "Happy Thoughts" in *Punch*. Became, after some years' connection with *Punch*, its editor (1880).

Burt, Mr. Thomas, M.P., the son of a working miner, b. Nov. 12th, 1837, by self-culture has improved the rudimentary education he received in early life. He worked in the coal mines until the age of twenty-eight, when (1865) he was appointed, during a strike, agent of the Northumberland Miners' Mutual Confidence Association, the membership of which then numbered 4,000, and the sum subscribed £4,000 (1885 membership 12,000, capital over £30,000). Mr. Burt still retains his position as secretary to the Association. He is also President of the Miners' National Union (a federation of various trade unions numbering 70,000 to 80,000 members). In 1874 Mr. Burt was returned in the Liberal interest as M.P. for Morpeth; re-elected 1885. He has been a member of several Royal Commissions, amongst

others those or inquiry into loss of life at sea, and accidents in mines.

Burton, Sir Richard Francis, K.C.M.G., traveller, scholar, and linguist; b. 1820. Educated abroad and at Oxford. Joined the Indian army in 1842, and passed in several native languages. He was much employed on secret service, living among the natives as one of themselves, and the information he furnished to General Napier proved of the greatest value in the conquest of Scinde and the Punjab. He was the first European who ever visited Harar; and his journey to Mecca and Medina in the disguise of a Mohammedan pilgrim is one of the most marvellous feats ever accomplished by a traveller. During the Crimean war he was Chief of Staff to General Beatson. He afterwards visited Somali Land. In 1857 he went to Zanzibar in company with Captain Speke, and made a journey into the interior, which resulted in the discovery of the great lakes Tanganyika and Victoria Nyanza. He was next consul at Fernando Po, at Santos in the Brazils, and at Damascus. He is now H.M. Consul at Trieste. He is the prolific author of many works, and has translated the "Lusiad" of Camoens. As a traveller, even in this age of great travellers, he stands pre-eminent, not alone for the unequalled journeys which he has performed, but also for his additions to our scientific knowledge. Created K.C.M.G. (Mar. 1886).

Bury, Visct. See ASHFORD.

Busch, Moritz. German author and journalist; b. February 13th, 1821, in the Neustadt, Dresden. He was educated in the University of Leipsig, where he studied theology and philosophy. Afterwards wrote for newspapers. In 1851 he went to America, travelled through the Northern States, and studied republican institutions. He returned to Germany, and in 1853 he published "Wanderings between the Hudson and the Mississippi." He travelled in Egypt, in Nubia, in Turkey, in Greece, and in Hungary. In 1860 he published "A Pilgrimage to Jerusalem," and "Pictures from the Orient." In 1870 he was summoned to the Foreign Office at Berlin, where he became an intermediary between the ideas of Prince Bismarck and the German press. Immediately attached to the German Chancellor, he went with him through the Franco-German war. In 1873 he became editor-in-chief of the *Kurier* of Hanover, and finally he returned to Berlin in 1878, where he settled. He has since published several works, among which are: "Wonderfully Saintly" (1879); "Count Bismarck and his People during the War with France" (1880).

Bushman or Bojesmen. A name given by the early Dutch settlers at the Cape of Good Hope to an aboriginal African race now found in small nomadic communities. They inhabit the desert country between the Hottentots on the west and the Bechuanas on the east, and from the interior of Cape Colony northward through the Kalahari Desert to the latitude of the Zambesi. They are very short in stature, with remarkably small hands and feet, long arms, high cheekbones, and very flat noses. Their complexion is yellow, hair black and woolly, growing in scanty tufts; and they are physically feeble, but can be made useful servants, and some are far from being unintelligent. They have a peculiar aptitude for depicting animal

forms, their caves or rock shelters being covered with drawings of a very spirited and remarkable character, in which hunting scenes, and sometimes mythological subjects and caricatures, are represented in red, white and black; the pigments used being clay and iron pyrites, crushed by stone mullers, and mixed with grease. The caves or rock-shelters in which these drawings are found are high up in the mountains, and serve as dwellings and places of concealment, some of them being very difficult of access. Their weapons are bows and poisoned arrows, the poison used being obtained from bulbs, euphorbias, and the poison bag of snakes. The arrow-head is generally made of the leg-bone of a bird, or of ivory, but now often of iron, and sometimes of discarded glass bottles, although anciently flint doubtless was employed; the shaft consisting of a reed 14 foot long. They make stone implements of a simple kind, and use a stick for digging roots loaded with a large perforated stone, which serves to weight it, and acts as a fulcrum to support the lever of the stick. Bushmen are the gipsies of inner South Africa, and are among the lowest races in the scale of human beings. They have no dwellings, except a few mats hung up on sticks, and their caves of refuge in the mountains. They have no idea of cultivating the soil, and possess no domestic animals. Hottentots, Bechuanas, and Kaffirs were of old their relentless enemies; while the Boers remorselessly shoot them as vermin. Lying hidden in the bushes, they retaliate by wounding the unwary traveller with their poisoned arrows. Once they were spread over fertile territories; now their home is the desert, where nature makes up for the want of water by supplying bountiful stores of juicy tubers, and a sort of water-melon. Their religion consists of sun, moon, and star myths, and is similar to that of the Hottentots.

Butchers, The Worshipful Company of. See CITY GUILDS, THE.

Bute, John Patrick Crichton-Stuart, 3rd Marq. of (creat. 1796), b. 1847, and succeeded his father in 1848. The 3rd Earl was the well-known minister to George III.

"**Butlerage.**" See REVENUE, THE.

Butt, Mr. Isaac. See HOME RULE.

Butter. See DAIRY FARMING.

Buxton, Mr. Edward North, M.P. of Knighton House, Essex, the third son of the late Sir Edward North Buxton, of Cromer, Norfolk, was b. 1840. Recently chairman of the School Board for London, of which he is a member. Returned in the Liberal interest as member for Walthamstow Division, South-West Essex.

Buys Ballot's Law. See METEOROLOGY.

Bye Elections, The Recent. See APPENDIX.

Byrne, Mr. Garrett Michael, M.P., was b. 1829. He was appointed Officer of Customs and Surveyor to the Board of Trade at the port of Liverpool (1886). Returned as a Home Ruler for Co. Wexford (1880-85); West Wicklow (1885).

Byron, George Frederick William Byron, 9th Baron (creat. 1653); b. 1835; succeeded his uncle in 1870. The 6th Lord Byron was the well-known poet. The 1st peer, a supporter of the royal cause, was eminently distinguished at the battle of Edge Hill and the victory of Roundway Down.

C

"C. and S." See MARINE INSURANCE.
Cabinet, The Present British. See NEW MINISTRY OF 1886.

Cabinets, Colonial and Foreign. See APPENDIX.

Cabinets, Principal Members of English, 1868-86. See APPENDIX.

Cabul. The capital of Afghanistan, 165 miles from the Indian railway station and fort of Peshawur, 600 from Herat, and 290 from Candahar; pop. 75,000. The Hindoo Koosh range protects it from a Russian attack *via* Balkh, but a Russian occupation of Herat would turn this barrier, and lay bare the natural defence of the Ameer's capital on the side of Turkestan. As the ruling centre of Afghanistan it is a place of great political importance, and, but for the barbarous character of the Ameer's rule, and his vexatious restrictions on trade, it would be a prosperous commercial centre, serving, as it does, as a link between India and Central Asia. Cabul has always been easily captured by English troops, and the completion of the railway to Peshawur, since the last Afghan war, coupled with the control we exercise over the Khyber Pass, would render the operation much easier. In all probability, Afghan rule will shrink in time to Cabul, which eventually will be hastened if the Ameer's death be followed by anarchy, leaving Candahar to be occupied by England, and Herat by either England or Russia. Through Herat and Candahar will pass the railway connecting India with Russia, and thereby with Europe. This opening-up of the new highway to the East will rapidly civilise and develop this part of Afghanistan, and Cabul, which lies off the route, will decay.

Cadogan, George Henry Cadogan, P.C., 5th Earl (creat. 1800); b. 1840; succeeded his father 1873. Was M.P. for Bath for a few months; appointed Parliamentary Under-Sec. for War (May 1875); Under-Sec. for the Colonies (1878 to May 1880); hereditary trustee of British Museum.

Cairns. See ANIMISM.

Cairns, Arthur William Cairns, 2nd Earl, (creat. 1878); Baron Cairns, 1867; b. 1861; succeeded his father in 1885; second title Viscount Carmoyle. Assistant secretary to the Duke of Richmond (President of the Board of Trade) in 1885. The 1st peer was twice Lord Chancellor of Great Britain (whose obituary notice see following).

Cairns, Hugh MacCallmont, 1st Earl, d. April 2nd, 1885. His lordship was b. 1819. Educated at Trin. Coll., Dublin, of which he subsequently became Chancellor. He was called to the bar at the Middle Temple (1844), and rapidly acquired an extensive practice in the Courts of Equity. He was returned for Belfast (1852), and continued to represent it in the Conservative interest until his elevation to the judicial bench. In 1856 he was appointed a Queen's Counsel and a Bencher of Lincoln's Inn. In 1858 he was appointed Solicitor-General. He became Attorney-General (1866). In the following October he was made Lord Justice of Appeal. In the following year (1867) he was created a peer, under the title of Baron Cairns of Garmoyle. In February 1868 Lord Cairns became Lord Chancellor in the room of Lord Chelmsford. In 1869 he resigned his

position as leader of the Conservative party in the House of Lords, but on the opening of the session of 1870 consented to resume it. In 1874 Lord Cairns again became Lord Chancellor. On September 27th, 1878, he was advanced to the dignities of Viscount Garmoyle and Earl Cairns.
Cairns, Lord, Act. See AGRICULTURAL HOLDINGS.

Caithness, George Phillips Alexander Sinclair, 15th Earl of (creat. 1455); Baron Barrogiil (1866), by which last title he sits in the House of Lords, b. 1861; succeeded his father 1881. The first Earl was Lord Chancellor (Scot.).

Caldecott Mr. Randolph, was b. 1846; d. at St. Augustine, Florida, Feb. 1886. Educated at King Henry VIII.'s school at Chester. Engaged in early life in a bank, but showed a taste for art, which he cultivated in his leisure hours. Came into notice as an artist (1875), by his illustrations to Washington Irving's "Old Christmas." This, succeeded by "Bracebridge Hall," and the first of his series of coloured picture books, made him more widely known. M. Caldecott was a contributor to the *Graphic*. He was elected a member of the Institute of Painters in Water Colours (1882), and occasionally exhibited his pictures at the Grosvenor Gallery. Amongst many works illustrated by him may be noticed "John Gilpin," "The House that Jack Built," "The Mad Dog," "The Great Panjandrum," with sketches of scenes in America which he was preparing at the time of his death, a portion of which appeared recently in the *Graphic*.

Caledon, James Alexander, 4th Earl of (creat. 1800), b. 1846, succeeded his father 1855. Elected a representative peer for Ireland (1877). The 1st Earl filled important offices in India.

Calender, "Old Style" and "New Style." In 1751 Lord Chesterfield, Lord Macclesfield, and Bradley the astronomer, drew up a scheme for the introduction of the "New Style" into England. It had long previously been adopted by all European nations, except England, Russia, and Sweden. The bill passed through both houses, and enacted that the year 1752 should begin on January 1st, in lieu of March 1st, and that September 3rd should be called September 14th, so that the eleven days, which the "Old Style" was now in error, should thus be lost and rectified. Other changes, effecting a coincidence of the solar and lunar years, were introduced; but the dates of payments remained unaltered.

"**Caliban.**" See NOMS DE PLUME.

Caloric. See HEAT.

Calorimeter (from *calor*, heat, and *metron*, measure). An instrument for measuring the quantity of heat given out by a body. Not to be confounded with the thermometer, or instrument for registering temperature. Temperature is the condition of a body in respect to sensible or kinetic heat—i.e., heat that is perceptible by the senses, and that can produce expansion of the air, alcohol, mercury, or other fluid used in the thermometer. The calorimeter measures the actual amount of heat given out by a body. The ordinary calorimeter is an instrument by which any body the quantity of heat given out by which is to be measured can be made to melt ice, and the mass of ice melted can be measured. This unit of

heat-quantity, not of temperature, is the quantity of heat that will raise the temperature of a gramme mass of distilled water from 0° to 1° C., when the barometer stands at 760 mm. This quantity of heat is the **thermal unit** (*thermos*, heat). The turning of a gramme of ice at 0° into a gramme of water at 0° (there is no change of temperature, only a change of state), requires 79.5 thermal units. By calculating the number of grammes of ice that are turned into water when a mass of heated substance is plunged in ice, and remembering that the conversion of each gramme of ice into water without rise of temperature requires 79.5 thermal units, we can calculate the number of thermal units given out—i.e., the amount of heat given out by the heated substance. The same instrument and the same experiments enable us to calculate the specific heat of a substance—i.e., the ratio of the quantity of heat required to raise one gramme of the substance from 0° to 1° C. to the quantity of heat required to raise a gramme of distilled water from 0° to 1° C.

Calthorpe, Frederick Henry William Gough-Calthorpe, 5th Baron (creat. 1796), b. 1826, and succeeded his father 1868. Was M.P. for Worcestershire East (Feb. 1859 till his succession to the peerage). The 1st peer represented Bramber in parliament (1774-90), and the 4th peer sat for the same borough (1826-30). The latter assumed the name of Gough only for himself alone (1845).

Calvinism includes a belief in such doctrines as divine predestination, original sin, and human depravity, election, effectual calling, and the final perseverance of the saints. These doctrines were received before the days of John Calvin, though he may be reckoned amongst the most learned and copious writers in their propagation and defence. The reception of these doctrines was the usual consequence of abandoning the Romish Church and joining the Protestant Church, especially in the earlier days of the Reformation. Calvinism takes in several other points of controversy, such as that of free will, the Sonship of the Second Person of the Trinity, and other differences in doctrine, as between Calvinists and Arminians. It seems necessary for the sake of accuracy, in a definition so unavoidably brief as this, to say that Antinomianism is altogether different from Calvinism, and also that Arminianism by no means implies Pelagianism. The number of Calvinists amongst Protestants may not be as great in proportion as it was in the time of Edward VI., but Calvinism has still a large majority amongst evangelical Protestants.

Cambrian. See GEOLOGY.

Cambridge, H.R.H. George William Frederick Charles, 2nd Duke of K.G., P.C., K.P., G.C.M.G., G.C.H., G.C.B., G.C.S.I. (creat. 1801), grandson to George III. and first cousin to the Queen, was b. at Hanover March 26th, 1819. He became a colonel in the British army in 1837, and succeeded his father Adolphus Frederic, 1st Duke of Cambridge, in 1850. Four years later (1854) he was raised to the rank of Major-General, on his appointment to command the two brigades of Highlanders and Guards united to form the first division of the army sent against the Czar Nicholas of Russia in the Crimean war of 1854-6. In 1856 he was promoted to the rank of General; in 1861 appointed Colonel-in-chief of the Royal Artillery and Royal Engineers; and

in 1862 raised to the rank of Field Marshal, and subsequently appointed Commander-in-chief of the British army. A practical soldier and able tactician, his consideration for the British soldier and his endeavours to reform abuses and raise the moral standard of the troops, has gained for him the title of the "soldiers' friend." It may be mentioned that when, in 1867-8, Bismarck and Von Moltke were reorganising the Prussian army, they did not hesitate to adopt several of the reforms which the Duke had introduced into the English army.

Cambridgeshire, The. See RACING.

Camden, John Charles Pratt, 4th Marq. (creat. 1812); b. 1872, succeeded his father the same year. The 1st Earl was Chief Justice of the Common Pleas (1761), Lord Chancellor (1766), and Lord President of the Council (1784).

Camera Lucida. An instrument used for drawing the outlines of objects on paper, consisting of a four-sided glass prism having an angle of 135° . The prism is so adjusted that rays of light coming from the object are internally reflected by the two sides of the prism which contain the angle of 135° , and then proceed to the pupil of the eye. The eye can by this contrivance view at the same time the image so formed and the sheet of paper, and hence the observer is enabled to trace the object upon the paper. The instrument was invented by Dr. Wollaston.

Cameron, Dr. Charles, M.P., M.D., LL.D., was b. 1841. Educated at Madras Coll. and St. Andrews. He is co-proprietor of the *North British Daily Mail* and of the *General Advertiser*. Returned in the Liberal interest as member for College Division, Glasgow (1885).

Cameron, Mr. J. Macdonald, M.P., was b. at Ballantrae, Ayrshire, 1847. Educated in science at the Royal School of Mines, where he was also Instructor in the Chemical Research Laboratory (1874-79). Returned in the Liberal interest as member for Wick Burghs (1885).

Cameron, Commander Verney Lovett, C.B., D.C.L., a distinguished naval officer and African traveller, was b. 1844. Entered the Royal Navy (1857); lieutenant (1865); commander (1876); retired (1883). Took part in the Abyssinian campaign; served on the East Coast of Africa; engaged on Sir Bartle Frere's special mission to Zanzibar; went to the relief of Livingstone; and has made important explorations in Central Africa, the Congo, the Nile, and Zambesi, etc., and was the first European who had ever succeeded in crossing tropical Africa from east to west. Has also visited Syria and Mesopotamia. Commander Cameron is a gold medallist of the Royal Geographical Societies of London, Paris, and Lisbon. Created C.B. (1876), is Hon. D.C.L. of Oxford, and possesses several foreign decorations. Is the author of "Across Africa," a work on Steam Tactics, etc.

Camoyes, Francis Robert Stonor, 4th Baron (creat. 1883); b. 1856, and succeeded his grandfather 1881. The peerage was in abeyance from the reign of Henry VI. until 1839. One of the Lords-in-waiting (Feb. 1886).

Campbell, Sir Archibald C., M.P., was b. 1837. Deputy Lieutenant and J.P. for the county of Renfrew. Colonel 1st Battn. Argyle and Sutherland Highlanders; lieut.-colonel late Scots Guards; colonel Renfrew Militia. Returned in the Conservative interest as member for Paisley (1868); Renfrewshire (1873); re-elected 1885.

Campbell, Sir George, M.P., K.C.S.I., son of Sir George Campbell, of Edenwood, Fifeshire, was b. 1824. Educated at St. Andrews and the East India Coll., Haileybury. Late member of the Council of India. Called to the bar at the Inner Temple (1854). Judge of the High Court of Calcutta. Has held the following official appointments: Commissioner of the Cis-Sutlej Provinces; Judicial Commissioner of Oude; and Lieut.-Gov. of Bengal (1871-75). Returned in the Liberal interest as member for Kirkcaldy District (1875-85); re-elected 1885.

Campbell, Mr. Henry, M.P. Private secretary to Mr. Parnell. Returned as a Nationalist for South Fermanagh (1885).

Campbell, Mr. James Alexander, M.P., LL.D., was b. 1825. Educated at Glasgow Univ., where he received the honorary degree of LL.D. Formerly a Glasgow merchant. J.P. for Lanark and Forfar counties. Was a member of the Scotch Universities Commission (1876); member of the Educational Endowments (Scotland) Commission (1878). Returned in the Conservative interest as member for Glasgow and Aberdeen Universities (1880-85); re-elected 1885.

Campbell, Mr. Richard F. F., M.P., was b. at Edinburgh 1831. Educated at Rugby. Formerly captain in 8th Madras Cavalry. J.P. and Vice-Lieutenant of Ayrshire, and holds a commission in the Ayrshire Yeomanry Cavalry. Returned in the Liberal interest as member for Ayr Burghs (1885).

Campbell-Bannerman, The Rt. Hon. Henry, P.C., M.P., M.A. (Cantab.), second son of the late Sir James Campbell, of Stracathro, Forfarshire, was b. 1836. Educated at Glasgow Univ. and Trin. Coll., Cambridge. Has held the following official appointments: Financial Secretary to the War Office (1871-74 and 1880-82); Secretary to the Admiralty (1882-84); Chief Secretary for Ireland and Keeper of the Privy Seal (1884). Returned in the Liberal interest as member for Stirling (1868-85); re-elected 1885. Secretary of State for War in the present cabinet (Feb. 1886).

Camperdown, Robert Adam Phillips Maldane-Duncan, 3rd Earl of (creat. 1831); b. 1841; succeeded his father 1867. Educated at Balliol College, Oxford, where he was 1st class in classics (1861). Was a Lord-in-waiting to the Queen (Dec. 1868 to July 1870), and a Lord of the Admiralty from the last date to Feb. 1874. The 1st Viscount was the celebrated Admiral Duncan, who achieved the splendid victory over the Dutch fleet off Camperdown (Oct. 1797). He received a grant of £3,000 per annum for himself and his next two successors in the peerage.

Campos, General Martinez. See SPAIN.

Canada, Geography of. See BIBLICAL ARCHAEOLOGY.

Canada, Dominion of, British North America. Consists of the Provinces of Ontario, Quebec—formerly styled Upper and Lower Canada—Nova Scotia, New Brunswick, Prince Edward Island, Manitoba, the North-West Territory, and British Columbia. The four first-mentioned provinces were united under one federal government in 1867; in 1870 Manitoba and the Territories were formed and admitted; British Columbia and its appanage Vancouver Island joined in 1871; Prince Edward Island in 1873. Newfoundland remains independent.

The total area is reckoned as 3,620,000 sq. miles, and the total population at about 4,750,000. The executive is in the hands of a Governor-General, appointed by the Crown, and assisted by a Privy Council, composed of heads of departments, similarly to the Imperial Ministry. Parliament consists of a senate and house of commons. Senators are called from the various provinces by the Governor-General, and sit for life; there are 78. Members of the commons are elected quinquennially on a low suffrage. Both senators and members are salaried, and receive travelling expenses. Ontario seats 24 senators and 92 members; Quebec, 24 and 65; Nova Scotia, 10 and 21; New Brunswick, 10 and 16; Prince Edward Island, 4 and 6; Manitoba, 3 and 5; British Columbia, 3 and 6. The several provinces have each a local parliament and administration under a Lieutenant-Governor. They dispose of their own revenues, and legislate for internal affairs, but are restricted from interference with the action or policy of the central government. There is no state church. Roman Catholics are the prevailing sect, numbering about 40 per cent. of the population; Anglicans are about 12 per cent.; Presbyterians and Methodists each rather more; Baptists, 6 per cent. The Dominion capital is **Ottawa**, pop. 28,000 (latest returns). The total public revenue is £6,662,908; expenditure, £6,430,713; debt, £50,517,149; imports, £24,248,925; exports, £18,942,501; shipping cleared (1884), 14,359,000 tons. Capital invested in manufacturing industries, £33,000,000; annual value of resulting manufactures, £62,000,000. The Imperial army in Canada consists of a force of 2,000 men, stationed in the fortress of Halifax, Nova Scotia, where, it is stated (*Times*, March 12th, 1886), in view of the recent opening of the Canadian Pacific Railway (see ENGINEERING), and the prospective new military route to India, the Government have decided to create an arsenal and make the city the most important British naval station in the New World. The Dominion army consists of volunteers and militia. All men between 18 and 60 must serve in one of the four classes of the militia. The active force consists of 2,637 cavalry, 37,316 infantry, 1,438 field artillery, 3,479 garrison artillery, and 282 engineers; total of 45,152 officers and men, besides a marine militia. The three classes of reserve number 655,000, rank and file. Dominion divided into 12 military districts. Military college at Kingston; artillery and infantry schools, etc. Canada has loyally offered troops to the mother-country on several occasions. Recently troops were employed in suppressing a revolt of Indians and half-breeds, known as Riel's insurrection, 1885. Principal historic event since federation has been the construction of the Canadian Pacific Railway across the continent (open 1885), and the consequent opening up of the immense North-West Territory. Including this, the Dominion has about 12,000 miles of railway and 24,000 miles of telegraph. The staple exports are grain and flour, timber, cheese, butter, cattle and sheep, minerals, coal, furs, etc. The largest city is Montreal, Quebec, pop. 140,000; the next, Toronto, Ontario, 86,415; Quebec, 62,446; Halifax, Nova Scotia, 36,000; Hamilton, Ont., 35,000; the capital, Ottawa, Ont., 28,000; St. John, New Brunswick, 26,000. Having from 10,000 to 20,000 are London, Ont.; Portland, New Br.; Kingston, Ont.; Charlotte-town, Prince Edward Island; having from

8,000 to 10,000 are Guelph, Ont.; St. Catherine's, Ont.; Brantford, Ont.; Bellville, Ont.; Trois-Rivières, Qu.; St. Thomas, Ont.; Stratford, Ont.: having between 7,000 and 8,000 are Winnipeg, Manitoba; Chatham, Ont.; Brockville, Ont.; Levis, Qu.; Sherbrooke, Qu.: having between 6,000 and 7,000 are Hull, Qu.; Peterborough, Ont.; Windsor, Ont.; St. Henri, Qu.; Fredericton, New Br.: having between 5,000 and 6,000 are Victoria, British Columbia; St. Jean Baptiste, Qu.; Sorel, Qu.; Port Hope, Ont.; Woodstock, Ont.; St. Hyacinthe, Qu.; Galt, Ont.; Lindsay, Ont.; Moncton, New Br. A vast number of works, official and unofficial, deal with Canadian subjects. Current pamphlets are obtainable from the High Commissioner in London, 9 Victoria Chambers, S.W. Some recent works are Bryce's "Manitoba," "The Canadian Almanac," for 1886; Hayden and Selwyn's "North America"; Lovell's "Gazetteer of British North America"; Maconn's "Manitoba and Canada"; Rae's "Columbia and Canada," and "Newfoundland to Manitoba"; Silver's "Handbook to Canada," etc.

The Province of Ontario extends along the north shores of the great lakes, and is important as containing the metropolis, and a large population (nearly two millions). People mostly of British descent. South very fertile. Toronto, the provincial capital, has a university. Area 200,000 sq. miles, including recent award. 22,000,000 acres occupied. Agriculture progressive; wheat, hemp, tobacco, maize, grapes, peaches, apples. Manufacturing towns; lumber and fisheries; rich soils; warm summers; very cold but healthy winters. Iron, copper, lead, silver, marble, petroleum, salt, gold. Admirable educational system. Free land grants. Ottawa river scenery very fine. Game abundant. Ottawa city contains some of the finest buildings on the continent.

The Province of Quebec lies eastward of Ontario, occupying both banks of St. Lawrence. Area 188,688 sq. miles; pop. 1,359,027; mostly descendants of original French colonists, called *habitans*. Grand scenery on rivers Saguenay, St. Maurice, Richelieu, etc. Capital Quebec: picturesque; impregnable fortress; historic associations. Montreal a splendid city, chief seaport, head of St. Lawrence navigation. Valuable fisheries, forests. Agriculture and climate as in Ontario. Gold, silver, copper, iron, plumbago, and other minerals. Divided into counties, etc. Education superior, denominational. Primary education obligatory, not free, under local control. Soil rich, land cheap, and free grants. Eastern townships on United States border, settled by royalists after War of Independence; excellent location for English emigrants. Quebec and Ontario best parts of Canada for settlers from old country to select.

The Province of New Brunswick lies along the Bay of Fundy. Area 27,174 sq. miles; pop. 321,223. Capital Fredericton; chief commercial centre St. John. Colonised 1761, and 1783, by disbanded troops from New England. Lumbering and fishing. Coal abundant; antimony, copper, iron, manganese. Ship-building. Good agriculture; fertile. Summer warm, winter very cold: healthy. Schools free.

The Province of Nova Scotia is a peninsula connected by narrow isthmus with New Brunswick. Incorporated with it Cape Breton Island, formerly distinct colony. Area 20,907 sq. miles; pop. 440,572. Originally French. Ceded 1714.

Capital Halifax, also an Imperial military and naval station. Soil fertile; agriculture as in western Europe. Fisheries. Forests. Coal and iron plentiful. Schools free.

The Province of Prince Edward Island lies in St. Lawrence Gulf. Area 2,133 sq. miles; pop. 108,091. Capital Charlottetown. Agriculture; sheep and horse breeding, fishing, ship-building. Summer as in south of England; winters mild. People generally very prosperous.

The Province of Manitoba is a perfect rect. angle, resting on the 49th parallel, watered by Red River and Assiniboine, and touching Lakes Winnipeg and Manitoba, about centre of continent. Formed 1870. Area 123,200 sq. miles; pop. 135,000. Great fertile prairies, suitable for grain or stock. Timber not prevalent. Capital Winnipeg. Summer like middle Europe; winter very cold, but dry, healthy, and little snow. Soils rich as any in the world. Traversed by railways. Whole country a coal-field. Land surveyed in numbered squares. Quarter section of square mile = 160 acres, free grant. Lands reserved to support free education. Many half-breeds. District of Keewatin, 500,000 sq. miles, pop. 10,000, infertile, lying between Ontario, Manitoba, and Hudson Bay, is under government of Manitoba.

The North West Territories lie between Manitoba and British Columbia, and between the United States boundary and the Arctic regions, comprising 2,600,000 sq. miles. Contain great lakes and large navigable rivers—the Mackenzie, Slave, Peace, Saskatchewan, among the chief. Great fertile region, similar in character to Manitoba, is divided into districts: Assiniboia, 95,000 sq. miles; Saskatchewan, 114,000 sq. miles; Alberta, 100,000 sq. miles; Athabasca, 122,000 sq. miles. These are destined to become separate provinces. Resources enormous, agricultural, pastoral, mining. Pop. 56,446, half Indians. Present capital Regina. 10,000 miles navigable rivers. Railway across.

The Province of British Columbia lies between the Rocky Mountains and the sea, and from the United States boundary to 60th parallel. Area 341,305 sq. miles; pop. 60,000. Till 1858 part of Hudson Bay Territory; then gold discoveries brought settlers, and it became a colony. Vancouver Island, 12,500 sq. miles, became a colony same year; with Queen Charlotte Island joined to British Columbia in 1866. Since 1871 a province of Dominion. Capital Victoria, on south-east of Vancouver. Chief town on mainland, New Westminster, on Great Fraser river. Province mountainous. Agricultural land limited. Much forest and pasture. Products, gold, coal, timber, furs, fish; cattle ranches and fruit-farms. Climate of Vancouver quite English; mainland a warmer summer and colder winter. Free land-grants. Male sex largely outnumbers female. (See Chittenden's "Guide and Travels in British Columbia," obtainable at High Commissioner's office in London.) Mineral resources vast, especially coal and gold.

Canadian Meat. See MEAT SUPPLY.

Canadian Pacific Railway. See ENGINEERING.

Canal, The Birmingham and London. See ENGINEERING.

Canal Boats Acts, 1877, 1884. The object of these Acts is to insure the proper condition of canal boats used as dwellings and the education of children who live on board such boats. Every canal boat used as a dwelling is to be

registered, with any one of the local sanitary authorities whose districts abut upon the canal on which the boat plies. Each boat upon registration is certified as a dwelling for so many persons, and must be lettered, marked, and numbered in a conspicuous manner on both sides. A certificate of registration becomes void upon any structural alteration of the boat affecting the conditions upon which it was obtained. The Local Government Board has power to make regulations for the registration, lettering, etc., of the boats; for fixing the number, age, and sex of the persons allowed to dwell in a boat, for promoting the habitable condition of the boats, and for preventing the spread of infectious disease by them. The local sanitary authority, when informed of a case of infectious disease on board a boat, may exercise in reference to it all the powers with which they are furnished by the Public Health Act 1875. Any person duly authorised by a sanitary authority or by a justice of the peace, and having reasonable cause to suppose that upon a boat there is any contravention of the Acts or any case of infectious disease, may enter and examine the boat in order to satisfy himself whether or no such is the case. Masters and owners of boats which do not satisfy the requirements of the Acts are liable to fines recoverable on summary conviction before two justices. A child living in a registered boat is assumed for the purposes of the Elementary Education Acts to be residing in the place of registration, unless he is actually attending school in some other district. Canal companies are empowered to establish schools in which canal boat children may be lodged and educated, although not boarded, gratuitously. The Local Government Board and the Education Department are to report every year to Parliament upon the execution of these Acts. The registration and sanitary authorities through whose districts the canal passes must similarly report every year to the Local Government Board. That Board must also appoint inspectors to see that the Acts are enforced. These inspectors are invested with powers similar to those of poor-law inspectors.

Canal Society, Civil International Inter-Oceanic. See **ENGINEERING (PANAMA CANAL)**.

Candahar. A town of 60,000 inhabitants, distant about 300 miles from Cabul, 369 from Herat, 145 from Quetta, and about 80 from the proposed terminal points of the Indian railway in the Khojak and Kwaja passes. Respecting its great strategical importance, very little difference of opinion prevails among the foremost generals of the day. While absolute unanimity does not exist as to whether we ought to garrison Herat, in spite of its importance, Viscount Wolseley, General Sir Frederick Roberts, Lord Napier of Magdala, and the leading generals of England and India, are agreed that any attempt on the part of Russia to seize Herat must be immediately followed by an English occupation of Candahar, so essential is this town for the defence of India. To enable this to be rapidly done, a great entrenched camp is being constructed at Pishin, 100 miles from Candahar, and railway *matériel* is to be stocked at Quetta, to enable the Pishin line to be extended to Candahar at a moment's notice. Candahar has been several times occupied by British troops, and recent events have justified the regret of our leading Indian generals in 1881 that it should have

been abandoned. As the controversy that raged then is constantly misrepresented by politicians of both sides, it should be pointed out that parliamentary sanction to the evacuation was given not because the majority of Liberal members were satisfied with the case presented by the Government and its military supporters, but because at the last moment Sir Charles Dilke and Lord Hartington intimated that England's retirement from Candahar was to be followed by Russia's retirement from Askabad to the Caspian. When Russia, instead of this, annexed Askabad, the Government policy underwent a change, and Pishin was retained. The English press, at the time, charged Russia with duplicity; but nothing has ever been published to prove that any such promise was actually made by Russia direct, while, on the other hand, Russia never at any time made any secret of her intention to annex the Akhal oasis. Sir Charles Dilke's statement would seem to imply that the misleading assurance emanated from Berlin. See **AFGHANISTAN**.

Canning, Mr. See **FIRE AND LIFE INSURANCE**.

Canonisation. The ceremony whereby a deceased person is raised to the order of the saints—a privilege now exclusively vested in the see of Rome. Canonisation cannot be made until at least fifty years have elapsed from the date of death.

Canons, Various Kinds of. **Canon Capitular** (*v. infra*, **Canon Residentiary**). **Canon Honorary**, appointed in some cathedrals. He keeps no residence, and receives no emolument. **Canon Penitentiary**, a canon of a cathedral invested by the bishop with the duties of penitentiary to the diocese. **Canon Regular**, a regular conventual canon. **Canon Residentiary**, also termed **Canon Capitular**. The senior canons who keep residence and receive emolument from their stalls. **Canons Secular** were not conventual, but kept the hours.

Canopus. See **EGYPTOLOGY**.

Canterbury, Right Hon. and Most Rev. Edward White Benson, P.C., D.D., 93rd Archbishop of (founded 596); b. 1829. Educated at King Edward's School, Birmingham, and at Trin. Coll., Cambridge (B.A., 1st class classics, senior Chancellor's medalist and senior optime 1852), Fellow of Trin. Coll. (1853). Ordained deacon (1853), priest (1857). Formerly one of the masters of Rugby School; and head master of Wellington Coll. (1858-72). A prebendary in Lincoln Cathedral (1869), and chancellor and canon residentiary (1872). Hon. chaplain to the Queen (1873-75), and chaplain (1875-77). Examining chaplain to Bishop of Lincoln (1873-77). Consecrated 1st Bishop of Truro (1877). Translated to Canterbury (1883). Is Primate of All England and Metropolitan. Patron of 187 livings.

Canterbury, Henry Charles Manners-Sutton, 4th Visct. (creat. 1835), b. 1839, and succeeded his father 1877. This is a branch of the ducal house of Rutland, springing from Lord George Manners (who assumed the name of Sutton), a younger son of the 3rd Duke. His fourth son was Charles Manners-Sutton, Archbishop of Canterbury, whose eldest son having been for seventeen years Speaker of the House of Commons, received a viscounty.

Cape Colony. The Cape of Good Hope is a promontory on the extreme south of Africa, and has given its name to the wide Colony,

whose boundaries now are :—West, the Atlantic Ocean; north, the Orange River to 22° east longitude; and Bechuanaland; east, the Orange Free State, Basuto-land, the Kei River; south, the Indian Ocean. It was first settled in 1652 by the Dutch, and, after changing hands several times, in 1814 the Cape of Good Hope became an English colony. The state of the Hottentot and other slaves of the Dutch settlers or "Boers" early called for attention, and after various attempts at legislation on their behalf, they were liberated in 1833 by the general Emancipation Act of the Imperial Parliament. This, and other things, caused much dissatisfaction among the Dutch, and large bodies from time to time *trekked* (i.e. migrated) northward, with all their belongings, and formed what have since become the Orange Free State, the Transvaal, and Natal. In 1820 England sent out 4,000 British settlers, who succeeded by their energy and perseverance in making the eastern districts of the colony what they are at the present day. There have been five great Kaffir wars on the eastern frontier—in 1811, 1818, 1835, 1846-53, 1857-63—devastating and laying waste whole regions of land; but the last of these was concluded in 1863. Since then, in 1879-80, the Basuto rebellion occurred, which spread also to the Transkei. The civilising influence of schools and industrial institutions, as well as more frequent intercourse between the races, the construction of railways and other public works, in which the labour of the native has been so necessary and so highly remunerated, are producing admirable changes for the better among the tribes. The Cape Colony has been gradually enlarged by annexations, the principal of which are (or were): Natal, annexed 1843, separated 1856; Basutoland, annexed 1868, separated and placed under the Crown, 1883; Griqualand West, annexed 1880; the Transkeian Territories, 1875-84; British Kaffraria, now East London, and King William's Land, having been a part of the colony since 1846. The chief towns in the colony are Cape Town, pop. 45,000, the seat of government; Port Elizabeth, pop. 13,000, the chief commercial port; Grahamstown, pop. 7,000, the capital of the eastern province; Kimberley, pop. 13,500, the seat of the diamond trade; Queenstown, King Williamstown, and Panmaze, or East London. The area of the Colony as at present constituted, excluding Basutoland and the Transkeian Territories, is 213,636 sq. miles, with pop. 1,122,000. The climate of the Cape is very beautiful, and noted for its beneficial effect upon consumptive, asthmatic, and rheumatic patients. The eastern districts are preferred by those who require a very dry climate, as the winter season is fine, the rains falling in the summer; while in the western districts the reverse is the case. The scenery of the Cape among the mountain ranges is exceedingly grand, while for beauty of landscape generally, Lower Albany and parts of British Kaffraria are not to be surpassed. The principal exports are wool, Angora hair, ostrich feathers, sheep and goat skins, diamonds, wines, spirits, hides and skins, copper ore, and aloes. The Government consists of a Governor appointed by the Imperial Government, a Legislative Council of twenty-two members, and a House of Assembly of seventy-four members. Members of the Legislative Council are elected for ten years, and of the Assembly for five years. The electors are the

same in each case, and are qualified as occupiers of property worth £50, or receiving £50 salary, or £25 with board and lodging. There is a responsible ministry of five principal ministers. The laws are founded on a modification of the Roman-Dutch Law. Both English and Dutch languages are used in Parliament and the Courts. There is a University at Cape Town (Royal Charter, 1877), and there are a large number of state-aided elementary schools, besides private and religious institutions. The principal denominations are Dutch Reformed, Episcopalian, Presbyterian, and Roman Catholic, which, until recently, received some state-aid. Total revenue (1883-4), £7,533,592; total expenditure, £5,374,982; debt, £19,658,267; imports, 1883 (excluding specie, £210,551), £5,470,391; exports (excluding specie, £425,117, and diamonds of declared value, £2,742,470), £4,408,828; of which the most valuable article is wool. Total imports, 1884, £5,260,697; exports, £7,031,744. For defence there is a force of Cape Mounted Rifles, 692; Cape Field Artillery, 85; Cape Infantry, 497; Volunteers, 2,833; and every able-bodied man between 18 and 50 is liable to be called out for military service. Whites number about a third of the entire population, and the greater number of them are of Dutch descent. The Transkeian Territories are ruled by resident magistrates under the Governor of the Cape Colony. Walfisch Bay, an isolated port on the coast of Damaraland (see LUDERITZLAND), was in 1884 proclaimed a part of Cape Colony. The colony possesses 1,523 miles of railway open, and extensions are being laid. The lines are government property. There are 8,663 miles of telegraph wires in operation, (See various headings relating to South Africa, and consult "The Cape of Good Hope General Directory and Guide Book" (1886); Holub's "Seven Years in South Africa," Keith Johnston's "Africa," Noble's "Cape and South Africa," Theal's "South African History and Geography," etc.)

Cape Wines. The vine attains to great perfection at the Cape. The principal wine districts are in Paarl and Stellenbosch, near Cape Town. There is plenty of good vine-land lying idle, and the opening seems now a promising one. An acre will carry about 1,500 vines, average produce 378 galls. of wine. For many years Cape wines have fallen into disrepute owing to the careless and hurried manner in which they were prepared for exportation. Up to 1859 the annual export exceeded a million gallons, and the price realised was very remunerative to the grower. Upon the introduction by Mr. Gladstone, in 1862, of wine duties varying according to alcoholic test, which allowed foreign countries to compete upon equal terms with the colonies, the Cape wine trade almost ceased, so far as importation into England was concerned; and notwithstanding repeated efforts on the part of the Cape farmers and merchants, twenty years passed without their being able to effect its reintroduction. But at last, by dint of improvement in grape culture, they have succeeded, and for the past three years have brought into the home market good, pure and delicious wines, which are able to compete with those of European manufacture. The export from the Cape is now about 90,000 galls., and is increasing. The principal wines now exported are White Drakenstein, Hermitage, White Cape, Cape Madeira, Pontac, White Frontignac, Constantia, and Red Mus

catel Constantia. The wine originally known as "The Constantia," and made by the Messrs. Van Reanen at their farm of that name, is a rich and luscious liqueur; but it is very seldom that any of it leaves the colony, as it realises a fancy price on the spot—often as high as half a guinea for a small pint bottle. The wine generally known as Sweet Constantia Pontac finds its best market in the Baltic, for Russian use: the grapes used in its preparation are allowed to shrivel on the vines with ripeness, in order to secure the full sweetness contained in the skins, while others are added for the juice. The Constantia vineyards were planted at the time of the arrival of the Huguenots from France in 1685-8, who took with them cuttings, etc., from their own vineyards, and the "wine industry" of the Cape dates chiefly from that time. One of the farms at Constantia has lately been purchased by the Cape Government from Mr. Cloete, with the idea of turning it into an experimental wine farm, under the superintendence of Baron von Babo, a German of some experience in this department, and who has lately been appointed by the colonial government to investigate and report upon the best methods of manufacturing wine in the colony. The returns annexed show the great increase in the imports of Cape wines into the United Kingdom recently. The notable rise in the year 1883, as compared with the previous year, appears likely to be maintained:—

	Gallons.	Value.
1880 . . .	12,380 . . .	£6,098
1881 . . .	9,932 . . .	4,756
1882 . . .	10,355 . . .	4,949
1883 . . .	49,735 . . .	15,989
1884 . . .	63,667 . . .	27,200

The returns for 1885 are not yet complete. These returns do not include exports from the Cape to other countries. In government reports the total export value for 1882 is quoted at £11,658, for 1883 at £23,845.

Capital and Labour. These may be roughly defined as—**Capital**, wealth destined to be consumed in the production of fresh wealth; and **Labour**, human exertion for a human end (see **POLITICAL ECONOMY**). Only the rudest and most elementary kind of labour can exist on its immediate produce; for any elaboration a reserved store of wealth is necessary—the produce of past labour, from which the labourer may subsist and provide himself with tools and materials, while his present labour is in process of completion. In highly organised communities, capital and labour are as a rule in the hands of separate persons, not indeed entirely, but to a large extent. In the opinion of some economists it is desirable to regard every labourer as embodying an investment of capital, in virtue of his maintenance and education during the unproductive years of childhood. And most economists hold some form of the doctrine that "industry is limited by capital," meaning that the possibilities of finding employment for more labourers will depend on increase in the quantity or the activity of the capital in the community. And so far as these two elements of production, capital and labour, are provided by separate persons, each of these persons will claim a share of the net finished produce, after the capital has been replaced for the purpose of further production. The amount of the share which is to go to each may be a matter of much dispute; and hence the "Capital and Labour" questions, which not unfrequently become so

acute. (See **STRIKES**.) To trace the history of these disputes in England alone would carry us back as far as the "Black Death," in 1348-9, when half the population was destroyed by pestilence. This sent wages up to double their former amount; and attempts were made, in the first and second Statutes of Labourers, to restore the former rates by laws. These failed, and taught the people their strength, and the result appeared in a rising under Wat Tyler; even earlier than which the labouring classes had heard, perhaps for the first time in England, the message of Socialism from the lips of John Ball. From the date of this rising (1381) till the final fall of the Combination Laws in 1825, the struggle between capital and labour continued to be fought out as a matter of legal enactment or repeal; a history concerning which Mr. G. Howell's "Conflicts of Labour and Capital" gives much useful information. It may well, then, be inquired whether this conflict is of necessity a permanent one; and so long as capital and labour are supplied by different persons, its permanence seems assured. Arbitration, and Courts of Conciliation have been recommended, and tried with comparatively little effect. It may be doubted whether any remedy can be effectual which does not go to the root of the matter, and arrange for some means by which labour can become the owner of its own capital. Some form of industrial partnership would appear to be the only way of bringing this about. The capital of Great Britain was estimated by Porter in 1840 at £4,100,000,000; by Levi in 1860 at £5,560,000,000; by Mulhall in 1882 at £8,720,000,000. These estimates give respectively £152, £195, and £248 of capital per head of the population. The estimates are made to consist of houses, railways, shipping, bullion, lands, cattle, etc., merchandise, foreign loans, furniture, roads, works, etc.

Capital of the United Kingdom, as estimated by Mr. R. Giffen:

UNITED KINGDOM.		GREAT BRITAIN.	
Year	Amount in £	Year	Amount in £
1800	115,000,000	1855	308,000,000
1843	251,000,000	1865	396,000,000
1853	262,000,000	1875	571,000,000

Capital Punishment. The punishment of death for murder is a question which has caused some discussion within the last few years; the arguments in its favour and against it being conflicting. Those who deprecate it argue that the Mosaic code is too severe, and would prefer solitary confinement for life as a substitute, favouring the idea that in this case the wrong person could never be executed. Others who maintain its restraining efficacy, answer that solitary confinement would soon produce mania and in any case would render numbers chargeable to the State whose lives were forfeited by law, while the deterrent influence of death would be rendered valueless as a factor for repressing murder. In the principal Continental nations capital punishment has been retained for the worst cases. In France and Belgium the guillotine, in Spain the garotte, in Germany, Austria, and Switzerland (optional with each

canton to inflict the penalty) the sword, in England and Russia the halter, await the murderer.

Carboniferous. See GEOLOGY.

Carbutt, Mr. Edward Hamer, M.P., was b. 1838. Has been a manufacturing engineer at Bradford. Member of the Institute of Mechanical Engineers, and Associate Member of the Institution of Civil Engineers. Mayor of Leeds (1878). Returned in the Liberal interest as member for Monmouth District (1880-85); re-elected 1885.

Cardiff. See MINING.

Cardinal Dean. See DEANS.

Cardinals, College of. See ITALY.

Cardwell, Edward, P.C., 1st Visct. (creat. 1874), was b. 1813. Educated at Winchester and Balliol Coll., Oxford, where he graduated double first, and was elected a fellow of his college. Called to the bar (1838). Entered parliament in the Conservative interest as member for Clitheroe (1842-47), and supported the Peel administration. On the accession to office of Lord John Russell, Mr. Cardwell, as an adherent of Free Trade and Sir Robert Peel, was elected for Liverpool, his native city (1847-52). Sat for Oxford City (1853-74); created Viscount (1874). Lord Cardwell held the following official appointments: Secretary to the Treasury (1845-46); President of the Board of Trade (1852-55); P.C. (1852); Chief Secretary of State for Ireland (1859-61) under Lord Palmerston; Chancellor of the Duchy of Lancaster (1861-64); Secretary of State for the Colonies (1864-66); Secretary of State for War (1868-74) in the Gladstone ministry. Lord Cardwell's name was prominently connected with the Jamaica riots, and the abolition of purchase in the army (Army Regulation Bill, 1871). Died Feb. 15th, 1886.

Carew, Mr. James Laurence, M.P., was b. 1853. He entered as a student at the Middle Temple, and was called to the bar at Lincoln's Inn (1874). Returned as a Nationalist for North Kildare (1885).

Carew, Robert Shapland George Julian Carew, 3rd Baron (creat. 1838); b. 1860, and succeeded his father 1881.

"Carle." See NOMS DE PLUME.

Carleton, Baron. See SHANNON.

Carlingford, Chichester Samuel Parkinson-Forbesque, P.C., 1st Baron (creat. 1874), b. 1823. Educated at Christ Church, Oxford, where he was first class in classics (1844), and obtained the Chancellor's prize for the English essay (1846). Was a Lord of the Treasury (Jan. 1854 to April 1855); Under-Secretary of State for the Colonies (June 1857 to March 1858, and June 1859 to Nov. 1865); Chief Secretary for Ireland (from the last date to June 1866, and Dec. 1868 to Dec. 1870); President of the Board of Trade (Dec. 1870 to Feb. 1874); Lord Privy Seal (1881-85); and Lord President of the Council (1883-5). Was M.P. for Louth (1847 till he became a peer, 1874). Assumed (1863) the additional surname of Parkinson.

Carlisle, Right Rev. Harvey Goodwin, D.D., 58th Bishop of (founded 1132); b. 1818. Educated at Caius Coll., Cambridge; B.A. (1840); and Wrangler and Smith's prizeman, and subsequently Fellow of Caius. Ordained deacon (1842), priest (1844), became incumbent of St. Edward's, Cambridge (1848); Dean of Ely (1858); consecrated Bishop of Carlisle (1869).

Carlisle, Rev. William George Howard,

8th Earl of (creat. 1661), b. 1808, and succeeded his brother 1864. Rector of Londesborough (1832-77). The 1st Earl was ambassador to Russia and Governor of Jamaica; the 3rd Earl, First Lord of the Treasury; the 7th Earl, long known as Lord Morpeth, was Lord Lieutenant of Ireland.

Carlisle Insurrection. See SPAIN.

Carlos, Don, Duke of Modena, claimant of the Spanish throne as heir to his father Don Juan, successor to Carlos VI., b. March 30th, 1848. His mother is the Archduchess Maria Teresa, Princess of Modena. He was educated in Austria. Don Carlos married the sister of the late Count of Chambord. In July 1873 he instigated a rising in the north of Spain, taking the personal command. He continued the struggle during the Republic, but was defeated by Marshal Serrano after Alfonso XII. came to the throne, and retired (March 1876) to England. He resides at the present time (Mar. 1886) in France.

Carlyle Society, founded in 1879, consists of "Students admiring Carlyle's works and desirous of extending his influence." Members are admitted by paying a yearly subscription, and they meet once in every month, when papers "suggested by Carlyle's works" are read and discussed. It counts some fifty members.

Carmen. The Worshipful Company of. See CITY GUILDS, THE.

"Carmen Sylva." See NOMS DE PLUME.

Carnarvon, Henry Howard Molyneux Herbert, P.C., 4th Earl of (creat. 1793), b. 1831, and succeeded his father 1849. Educated at Eton and Christ Church, Oxford, where he was 1st class in classics (1852). High Steward of the University of Oxford (1859). Elected pro-Grand Master of the Freemasons in England (1875). Was Under-Secretary for the Colonies (1857-59); Secretary of State for the Colonies (June 1866 to March 1867, and Feb. 1874 to Jan. 1878). Was Lord Lieutenant of Ireland June 1885 to Jan. 1886, when he was recalled prior to the fall of the Salisbury cabinet.

Caroli Administration, The. See ITALY.

Caroline Islands. This archipelago, or group of islands, in all numbering five hundred, lies to the east of the Philippines, in the Pacific Ocean, between lat. 30° and 12° N., long. 130° and 170° E. These islands, first discovered in 1543 by Lopez de Villalobos, were named after Charles V. of Spain, but they seem never to have been settled by the Spaniards. The Spaniards took formal possession of them, but appear only to have sent out missionaries. The Caroline Islands are sometimes called the **New Philippines**; they measure about 2,000 miles from east to west, but are chiefly low-lying lagoons or atolls. At Yap, which may be described as the chief of the Carolines, there are hills said to contain precious metals. The inhabitants are generally of the Papuan race, and owe what civilisation they are acquainted with chiefly to the American missionaries. The islands are prolific in tropical verdure. The inhabitants are docile and hospitable, and are ruled by a number of small chiefs. No little excitement was caused all over Europe towards the end of last summer (1885), owing to a dispute which arose between Spain and Germany as to the possession of the Caroline Islands, in the Philippines. On March 9th, the Spanish Government sent instructions to the Captain-General of the Philippines to annex

the Carolines. Nothing more was heard of this matter till Germany, in pursuit of her colonial policy, appeared on the scene (an Imperial charter to a German Colonisation Society was published on March 3rd, and an East African company was floated on the 17th, (see GERMAN COLONISATION); and on August 17th considerable commotion was caused at Madrid by the announcement that she claimed at least portion of the Islands. Two gunboats were at once ordered to proceed to the spot to protect Spanish interests, and representatives were forwarded to Berlin. The German view of the question was sufficiently expressed in the *National Zeitung* of August 16th, as follows: "The recognition of the ancient Spanish claim to the Caroline Islands, which in reality only exists on paper, has on several occasions been expressly withheld by Germany and other powers on the ground that Spain has never taken actual possession of these islands. Germany had a right to hoist her flag there, inasmuch as several German firms trading in the Pacific, to whom the Empire has to afford protection, have branch establishments in the Carolines." On the other hand, the press of Madrid, without distinction of party, warmly took up the other side, pointing out that preparations had been made in the spring of the year (see above), by the Governor of the Philippines to effectively occupy the territory. It was then rumoured that King Alfonso (*q.v.*) had sent to Berlin his resignation of the Honorary Colonelcy of the Prussian Uhlans Regiment, to which he was appointed in 1883. This was afterwards denied, but public feeling was soon excited to such a pitch that Count Solms-Sonnenwalde, the German Minister at Madrid, in face of the frigid reception he met with, no longer appeared at public resorts. On August 23rd a great public demonstration was held on the *Prado*, it being computed that 30,000 persons attended, but no disorder ensued. As a retort, the semi-official *North German Gazette*, of August 24th, called attention to the nature of the German note of March 4th, 1875, and to the British note on the same subject, addressed to Spain, which were to the effect that these powers could not recognise the sovereignty of the latter over the Carolines, or the *Paleo Group*, as she had never exercised any actual dominion over them. In the meantime the German Government only replied to the urgent messages from Madrid by offering to consider the Spanish claims in the most friendly spirit. The excitement extended to France, where of course anti-German expressions soon became common; and at Paris it was reported that Don Carlos (*q.v.*) had offered his sword, and those of his adherents, to Spain, in case of war. Demonstrations on the same lines as the one at Madrid were continued all over the provinces, and the tension was not relaxed when it was rumoured on August 27th that Germany had suggested that Italy should arbitrate on the matter. On the 28th news reached the Spanish capital that the Captain-General, in accordance with instructions, had hoisted the flag at *Yap*, one of the group of islands. But the next public announcement was of a very different character, and the news had evidently been kept back in view of the excited state of the public mind. On September 4th it was made known that while the Spanish commander lay with his gunboats off *Yap*, and during his preparations to land and

take possession, the German gunboat *Itia* arrived on August 24th, at once landed some men, and there and then planted the German flag. This caused a wild and disorderly scene in the streets of Madrid, and a mob of 6,000 persons tore down the coat of arms in front of the German Legation, and burnt them in the *Puerta del Sol*. The demonstration was continued the following night, and in the meantime it was considered advisable to place a guard over the Count Solms-Sonnenwalde when he appeared in the streets. The Government dismissed the commanders of the Spanish war-vessels by telegraph, as it appeared they had been in *Yap Bay* for three days before the Germans arrived. Further diplomatic communications followed, and the German minister, September 6th, informed the President of the Council that his Government would have prevented the planting of their flag if they could have communicated with the gunboat. During all this ferment and the scheming of rival parties in his capital, the young King Alfonso exhibited exemplary coolness, and his dispassionate view of the whole matter was considered to have materially helped towards a peaceful issue. The *Itia* left the island, and on September 25th it was announced that Spain had accepted the offer of Germany to appeal to the Pope Leo XIII. (*q.v.*), as arbitrator. On November 18th it was reported from Rome that Germany had acquiesced in the Pope's decision, which in effect recognised the ancient Spanish sovereignty, but on behalf of the latter Government secured to the Germans special trade privileges in the archipelago. This to all intents and purposes put an end to the contention, and the Act settling the question was formally signed on December 17th, at the Vatican, by Cardinal Jacobini and the representatives of Germany and Spain.

Carpenter, Dr. W. B., C.B., F.R.S., d. Nov. 10th, 1885, in his 73rd year from accidental burns caused by the overturning of the lamp of a vapour bath. He was b. at Bristol 1813. Educated at the Bristol School of Medicine and University Coll., London. Became a member of the English College of Surgeons and a Licentiate of the Society of Apothecaries in 1835, and graduated M.D. at Edinburgh (1839); LL.D. (1871); President of British Association (1872). He practised his profession for a short time in Bristol, but in 1843 came to London to devote himself to physiology. Dr. Carpenter was appointed, in 1856, Registrar of London University, an office he held for twenty-two years, and which left him free to follow the bent of his genius. He was the author of several important works on mental physiology.

Carpenter, Rt. Rev. William Boyd, D.D., Bishop of Ripon. Educated at Cambridge, where he graduated Senior Optime (1864); Vicar of St. James', Holloway (1870), Christ's Church, Paddington (1879); Canon of Windsor (1882); Bishop of Ripon (1885). Bishop Carpenter is a popular preacher of the Evangelical Party. Has written, among other works, "A Commentary on the Book of Revelation."

Carpenters, The Worshipful Company of. See CITY GUILDS, THE.

Carrington, Charles Robert Carrington, P.C., 3rd Baron (creat. 1797), b. 1843, and succeeded his father 1868. Joint Hereditary Great Chamberlain. Governor of New South Wales since 1885. M.P. for Chipping Wycombe (1865-68). The present peer's father assumed the

name of Carrington in lieu of Smith, by royal licence, in 1839.

Cartagena. See SPAIN.

Carysfort, William Proby, 5th Earl of (creat. 1789); Baron Carysfort (1801), by which last title he sits in the House of Lords; b. 1836, and succeeded his brother 1872.

Cascarilloes. The Indians of South America employed in stripping the bark from the cinchona trees.

Castelar y Rissoll, Emilio. Spanish statesman and orator, b. in 1832; one of the most eloquent living public men of Europe. In the revolutionary movement of 1868 Castelar joined the Republicans. Serrano quelled the rebellion, and Señor Castelar narrowly escaped with his life, taking refuge in Geneva. At the elections of 1868 Señor Castelar found himself in a hopeless minority in the Constituent Cortes. He opposed a return of the monarchical government. On the abdication of King Amadeo he became Minister for Foreign Affairs, and in 1873 he was chosen President of the Cortes, and subsequently President of the Executive Power. At this time war was raging in the Biscayan provinces of Spain, and Castelar pro-rogued the Cortes, and constituted himself a sort of dictator. The Cortes, when it reassembled, declined to pass a vote of confidence in him, and he withdrew. At the accession of Alfonso XII. Castelar left Spain for a time; but in 1876 he obtained a seat in the Cortes as deputy for Madrid, but has not held office since. Señor Castelar is a writer on historical, literary, and political subjects.

Castlemaine, Richard Handcock, 4th Baron (creat. 1812), b. 1826, and succeeded his father 1860. Elected a representative peer for Ireland (May 1874).

Castletown, Bernard Edward Barnaby FitzPatrick, 2nd Baron (creat. 1869); b. 1848; succeeded his father in 1883. M.P. for Port-arlington (1880-83).

Cathcart, Alan Frederick Cathcart, 3rd Earl (creat. 1814); b. 1828; succeeded his father 1859. The first Earl was commander-in-chief of the military forces in the expedition to Copenhagen (1807). He had been ambassador in Sweden, Russia, etc. The 2nd Earl was also a General officer of distinction.

Cathedrals. The cathedral is the chief church of the diocese, in which the bishop's seat is fixed. In many cases English cathedrals were originally monastic churches, over which a bishop was set; in others, the bishop having been set over a district, chose his own church. English cathedrals were of two classes—(1) Where the clergy were monks; (2) where the clergy were secular canons. Gradually the dean grew to exercise greater power in his cathedral than the bishop, and many quarrels ensued in consequence. After the suppression of the monasteries by Henry VIII., the monastic cathedrals (Canterbury, Carlisle, Durham, Ely, Norwich, Rochester, Winchester, and Worcester, were remodelled, and the bishoprics founded by Henry (Bristol, Chester, Gloucester, Oxford, Peterboro', and Westminster) were provided with cathedrals. The last lost its bishop, but kept its dean and its position as a cathedral. The cathedrals of Liverpool, Manchester, Newcastle, Ripon, and St. Albans are of recent foundation: new bishoprics are in contemplation, together with the transformation of some of the old churches into cathedrals.

Cathedrals of Established Church of England, List of.

Cathedral.	Archbishop or Bishop.	18—	Income.
Canterbury	Benson ...	83	£15,000
York	Thomson ...	63	10,000
London	Temple ...	85	10,000
Westminster	Bradley (Dn.)	81	2,000
Durham	Lightfoot ...	79	8,000
Winchester	Browne ...	73	6,500
Bangor	Campbell ...	59	4,200
Bath and Wells	Hervey ...	69	5,000
Bristol	Ellicott ...	63	Attached to Glouc.
Carlisle	Goodwin ...	69	4,500
Chester	Stubbs ...	84	4,200
Chichester	Durnford ...	70	4,200
Ely	Compton ...	86	5,500
Exeter	Bickersteth ...	85	4,200
Gloucester	Ellicott ...	63	5,000
Hereford	Atlay ...	68	4,200
Lichfield	Maclagan ...	78	4,200
Lincoln	King ...	85	4,500
Liverpool	Ryle ...	80	3,500
Llandaff	Lewis ...	83	4,200
Manchester	Moorhouse ...	86	4,200
Newcastle	Wilberforce ...	82	3,500
Norwich	Pelham ...	57	4,500
Oxford	Mackarness ...	69	5,000
Windsor	Davidson (Dn.)	83	2,000
Peterboro'	Magee ...	68	4,500
Ripon	Carpenter ...	84	4,200
Rochester	Thorold ...	77	3,100
St. Albans	Claughton ...	77	4,500
St. Asaph	Hughes ...	70	4,200
St. David's	Jones ...	74	4,500
Salisbury	Wordsworth ...	85	5,000
Sodor and Man	Hill ...	77	2,000
Southwell	Ridding ...	84	3,000
Truro	Wilkinson ...	83	3,000
Worcester	Philpott ...	61	5,000

Cathedral Statutes Bill, 1884. A Bill introduced by Mr. Beresford Hope, Mr. Cropper, and Mr. Dalrymple. It provided for the appointment of a cathedral committee of Privy Council, consisting of the two Archbishops, the Bishop of London, the Lord President, Lord Chancellor, and four others, to whom the commissioners appointed for the purpose of inquiring into the condition of the several cathedral churches of England and Wales might submit such alterations in the statutes of any cathedral as they deemed expedient. After the expiration of their commissions, any dean and chapter, with the consent of their visitor, were to have submitted such alterations to the same committee. The committee might, with the consent of the dean and chapter, modify any draft statute so submitted to them, and recommend it for the approval of the Queen in Council. Before being recommended for approval every draft was to have been laid in print before both Houses of Parliament.

Catholic. This term is an epithet of the Church Universal, and includes all those who believe in the doctrines and teachings of the Apostles, delivered by them to the early Church. It originally distinguished Christians from Jews; now it is used by Churchmen to separate themselves from Nonconformists. **Roman Catholics,** and **Anglican Catholics,**

though both are strictly Catholic, must not be confused; it is incorrect to speak of either as "Catholics" alone.

Catholic Emancipation. The statutes of William III., which subjected the Romanists to many restrictions of rights, although for a long time not enforced, were repealed for England (only) in 1778. This led to serious disturbances in Scotland, and a Protestant Association was formed under Lord George Gordon, leading to the famous Gordon Riots in London. In 1791 a bill was passed allowing Romanists who took the oath of allegiance to hold property and enter the legal profession, and also Catholic peers to approach the king. In 1792 and 1793 the Irish parliament abolished many of the hardships that attached to Roman Catholics there, and the latter year also saw a Scotch Relief Bill passed. Complete Catholic emancipation did not follow till 1829, when Romanists were made admissible for both houses of parliament, to judicial (but not ecclesiastical) offices, and to all political and civil offices, with a few exceptions.

"Catilina." See IBSEN, HENRIK.

Caucus. *The*, is a nickname applied in the first instance by Lord Beaconsfield to the system of political organisation of which the Birmingham Liberal Association is a type, and in particular to the organisation called the National Liberal Federation (*q.v.*), which consists of a union for national purposes of all such associations as are established on the Birmingham lines throughout the kingdom. The Caucus, therefore, is of two degrees: the local caucus, existing in every constituency in the kingdom which has any active political life; and the national caucus, which is simply a federation of local caucuses acting in unison with each other. The distinguishing characteristic of the system is its foundation in the law of popular election. The local association includes within it every one who signifies adherence to the objects of the association. Its general committee, or council, is elected at a public meeting of Liberals open to all, summoned by advertisement; any Liberal resident in the ward or division in which the meeting is called being at liberty to propose whom he thinks fit. The power of determining the policy of the association, and of selecting parliamentary candidates, rests entirely with this committee, appointed directly by the Liberal electors of the constituency. The committee is limited in number, its size varying from 300 to 2,000, according to the population of the constituency. The National Liberal Federation was called into existence by the frequent necessity of combined action on the part of the whole Liberal party. All associations based on representative principles may join the Federation; every federated association, however, preserves absolutely its independence. The general committee, in which is vested the chief power, is composed of representatives of all affiliated organisations in proportion to the population of their constituencies. Its functions are to aid in the organisation of the Liberal party throughout the kingdom, and to ascertain, and endeavour to carry into effect, the opinions of Liberals upon current political questions. Both the local association and the National Federation are completely representative of and responsible directly to the Liberal electors of the country, their trust having to be annually re-

newed by free popular choice; briefly, the Caucus may be said to be the organisation of the people themselves for the purpose of self-government in political matters. The Birmingham Liberal Association, which was the first association established on this basis, was founded in 1867. Its first president was Mr. George Dixon, M.P.; its present president is Mr. F. Schnadhorst (*q.v.*). The National Liberal Federation was founded in 1877, the Right Hon. W. E. Gladstone, M.P., attending the public meeting which was held at its inauguration. It is universally admitted that the federation exercised a powerful influence in returning Mr. Gladstone to power in 1880; it originated and carried through to a successful issue the agitation for the extension of the franchise to the county householders; and it is in a large measure due to its efforts that the county constituencies in the election of 1885 returned so large a proportion of Liberal members.

"Caveat Emptor." See NOMS DE PLUME.

Cavendish, Lord Edward. M.P., is the third son of the Duke of Devonshire; b. 1838; educated at Trin. Coll., Cambridge; held a commission in the Rifle Brigade (1860), to which he was Musketry Instructor (1861-64). Retired from the army (1865). He is Deputy Lieutenant and J.P. of Derbyshire, lieutenant-colonel commandant of the 3rd Battalion Derbyshire Militia. Lord Cavendish was private secretary to Earl Spencer, Lord Lieutenant of Ireland (1873-74). Sat for East Sussex in the Liberal interest (1865-68); North Derbyshire (1880-85); West Derbyshire (1885).

Cavour, Count Camillo Benso di. Italian statesman of modern times, b. of a Piedmontese family Aug. 1st, 1810. He was educated for the army, but his liberal opinions in politics compelling him to withdraw from the public service, he devoted himself to agriculture. In 1842, when in the Chamber of Deputies, he advocated the adoption of a Liberal constitution for Sardinia. After the disastrous battle of Novara, Cavour was called to office, and filled in succession the posts of Minister of Agriculture and Commerce, Marine, and Finance. In 1852 he succeeded the Marquis d'Azeglio as Premier. From that time to his death (June 6th, 1861), the history of Sardinia was identified with his name. He introduced free trade, and remodelled the Sardinian constitution upon that of England, and by allying Sardinia with England and France in the Crimean war, and by making war with Austria (1859), he prepared the way to the throne of Italy for Victor Emmanuel. Count Cavour must be considered the author of Italian unity, though he did not live to see Venetia and Rome ceded to Italy. In politics he was always a moderate and constitutional Liberal.

Cawdor, John Frederick Vaughan Campbell, and Earl of (creat. 1827); b. 1817; succeeded his father 1860.

"Caxton, Plautarchus." See NOMS DE PLUME.

Cayenne. See COOLIE.

"Cecil Davenant." See NOMS DE PLUME.

"Cecil Power." See NOMS DE PLUME.

Cell. A microscopically small, semi-fluid, semi-solid, primarily spheroidal body, which often assumes other forms, and which consists of a soft mass of living, contractile, colloidal matter (cell substance, protoplasm) and a central structure, consisting of a small, round-

ish body, generally more solid than the rest of the cell—the nucleus. A cell-membrane or cell-wall may exist, as in most vegetable cells, or may be wanting, as in most animal cells. It is the earliest anatomical and physiological unit, or as Hæckel defines it, "the organic unit of form, an individual of the first order." The term "cell" is not accurate, but it was given by Schlieden, because in cross-sections of most parts of plants where the cells are separated by solid walls, and contain a soft substance, or liquid, they look like the cells of a honeycomb—hence the term "cell." The cell-substance, or *protoplasm*, which surrounds the nucleus, is a very complete albuminous and nitrogenous substance, and it possesses certain fundamental vital properties—namely, it is contractile, irritable and automatic, receptive and assimilative, metabolic and secretory, respiratory, and reproductive. The nucleus is a minute round, oval, or spheroidal mass of protoplasm, imbedded in the cell-substance. It is more solid usually than the cell-substance, and it has different optical and chemical reactions; it is more readily stained by colouring-matters, and offers more resistance to acids and alkalis. Its intimate structure is very complex, consisting, in some cells, of a very delicate network running in all directions. The cell-wall, when present, consists of an alteration of the external portion of the cell-body, and is not a separate structure. The size of cells varies from '006 or '007 to '23 millimetres. Their shape is very variable. The amoeboid cells (so called from the organism named *Amœba*, which is the type-form of one-celled organisms)—e.g. the white blood-corpuscles, lymph and connective-tissue corpuscles, inflammatory cells, fresh pus cells—have, properly speaking, no fixed shape; some, such as myeloid or giant-cells, are most irregular in shape, and contain many nuclei; some, such as fibre-cells, are elongated; some, such as nerve-cells, are stellate with many processes; some cylindrical, some columnar, some flat, etc. The giant-cells in tubercle are very large and irregular, with as many as 300 nuclei, and they have most complicated and extensive processes. There are many single-celled plants and animals—for example, the infusoria, flagellata, gregarina, etc.—and every animal body, however complex, consisted once of one cell, and when fully developed is nothing but groups of cells peculiarly associated together. In the evolution of living beings, in the higher animals and plants, certain groups of cells have become differentiated in structure, and manifest only certain of the properties of protoplasm, which are enumerated above, to the exclusion of the other properties. Thus, some cells become differentiated and manifest, say contractility, and these constitute the so-called muscular tissue; the same with the other tissues. Cells proliferate generally by fission, in two distinct ways, the direct and the indirect. In direct division there is no change to be seen in the intimate structure of the nucleus; but in indirect division there is a complicated series of changes in the structure and form of the intranuclear network, to which the name *Karyokinesis* has been applied. This is of importance, as it is observed in some diseases. Each kind of tissue by proliferation produces, as a rule, only tissues of the same kind; and it is believed that new cells must always be descended from some pre-existing cell. This belief Vir-

chow stated in the famous words: *Omnis cellula e cellula*. All cells have but a limited duration, and are subject to the various forms of degeneration, and die; so that the tissues are being continually renewed. The vegetable cell has some special qualities of its own. There is usually a cell wall, formed of cellulose, a substance isomeric with starch. During growth this undergoes certain changes, such as the woody, the corky, or the mucilaginous; and mineral matters are often deposited therein; and as so-called degradation products of the cell-walls of vegetable cells, may be mentioned the various gums, and gum-resins. Various bodies, such as chlorophyll, certain crystalloids, and starch, are often contained in the protoplasm of vegetable cells, and the protoplasm itself undergoes vacuolation to form the cell-sap cavity. The cells of plants were known to Grew in 1682.

Cellulose. The chief constituent of the walls of the cells of plants. In the walls cellulose is associated with water and with certain mineral salts. This chief substance of the cell-wall is secreted or separated from the chief substance of the cell contents, protoplasm. In chemical composition cellulose is closely allied to sugar, dextrin, or gum and starch. All these and certain other bodies belong to the group of carbo-hydrates. The carbo-hydrates are organic compounds made up of carbon (carbo-hydrates), and of hydrogen and oxygen in the proportion 2 to 1: i.e., the proportion in which these two elements occur in water (carbo-hydrates). The general formula of the carbo-hydrates is therefore: $C^mH^{2m}O^n$. The particular formula of starch is $C^6H^{10}O^5$ (where $m = 6$, $n = 5$). That of cellulose is $(C^6H^{10}O^5)_n$, i.e. a molecule of cellulose is more complex than a molecule of starch. Possibly $(C^6H^{10}O^5)_3$ is the true formula of cellulose, which in that case has a molecule thrice as complex as that of starch. Protoplasm contains carbon, hydrogen, oxygen, and at least nitrogen in addition. Hence probably starch is a preliminary to the formation of cellulose. Cellulose is solid, colourless, tasteless, odourless, firm, elastic, 1.45 specific gravity, insoluble in water, hot or cold, in alcohol or ether; resists alkalis, dissolves in strong sulphuric acid. Treated with iodine it in rare instances turns blue, as starch does. This reaction occurs much more readily if the iodine is mixed with sulphuric acid or a strong solution of zinc chloride ($ZnCl_2$). These addenda to the iodine do not appear to act simply as cleansers and purifiers of the cellulose. Cellulose presents differences in different plants and in different organs. These may be due to differences in the substance itself, or to the varying nature of the materials that incrust the cellulose. This is nearly pure in cotton, linen, pith of elder, or the pith of *Aralia papyrifera* (rice paper). Wood must be macerated in water, and then boiled a minute or two in nitric acid; cork must be macerated and then boiled in caustic potash; and both must then be washed with water before the iodine reaction is given by their cellulose. **Gun-cotton** is formed by treating cellulose with strongest sulphuric and nitric acids. Gun-cotton is in fact nitro-cellulose. **Collodion**, used in photography, is gun-cotton dissolved in ether. Cellulose, though universal in the plant kingdom, is not confined to it. In the outer body-wall of the baglike ascidioida or tunicata, a molluscoid group, containing the representative of the original

ancestor of the vertebrata according to Charles Darwin, is tunicin. **Tunicia** is a substance identical with cellulose.

Cenozoic. See GEOLOGY.

Centigrade (from *centum* = a hundred, and *gradus* = a degree). The name of one of the three scales used in thermometers (*q.v.*). The thermometer is first plunged in melting ice. The level at which the fluid (generally mercury) employed in the thermometer stands, is marked either on a scale outside the tube of the instrument, or better, on the glass itself. This marking is called the freezing-point of water, and is on the Centigrade scale denoted by 0° . The thermometer is then completely immersed in the steam of boiling water. The level at which the fluid employed in the thermometer now stands is also noted. This marking is called the boiling-point of water, and is on the Centigrade scale denoted by 100° . The space on the scale between freezing-point (0°) and boiling-point (100°), is divided into 100 equal parts, each of which is called a degree. This thermometric scale was invented by Anders Celsius, a Swede (b. at Upsala 1761, d. 1744). It is in use among almost all Continental nations, and is the only thermometric scale used in scientific investigations. To turn the Centigrade record into the corresponding Réaumur record, the number on the former scale is multiplied by 4, and divided by 5: e.g., 100° C. are equivalent to $100 \times 4 \div 5 = 80^{\circ}$ R. To turn Centigrade into Fahrenheit, multiply by 9, divide by 5, and add 32: e.g., 100° C. are equivalent to $100 \times 9 \div 5 = 180 + 32 = 212^{\circ}$ F.

Central Africa. See AFRICA, CENTRAL.

Central America. Under this head are included the republics of Costa Rica, Guatemala, Honduras, Nicaragua, and San Salvador. —**COSTA RICA** is governed by a President, a Senate, and a Chamber of Representatives, each elected for four years by the "respectable" inhabitants. Constitution promulgated in 1859, but frequently interrupted by pronunciamientos, and practically suspended from 1870 to 1882. Area 26,040 square miles; population about 180,000. Revenue in 1885 about £573,000; expenditure about £592,000. Foreign debt about £2,400,000, excluding £1,479,000 arrears of interest. Internal debt about £230,000, stated to be in course of rapid redemption. History presents no facts of interest. —**GUATEMALA**, governed by President and Assembly, each elected for six years by universal suffrage. Area 41,830 square miles; population about 1,280,000. Revenue in 1884 about £1,600,000; expenditure about £1,500,000. Debt about £1,600,000, of which external debt reaches £540,000, not including arrears of interest about £250,000. There is also a floating debt of unknown amount. Army nominally 2000, with reserves about 33,000. In 1872 a war took place with Honduras. In 1874 the Commandant of Guatemala having imprisoned and flogged the British consul nearly to death, was imprisoned for five years and compensation paid. In April 1885 the President Barrios was killed in battle, in an unsuccessful attempt to unite the Central American States under his dictatorship. —**HONDURAS** is governed by a President and Congress, elected for four years; but there have been no regular elections in recent years, and no President has served the full term. Revenue in 1883-4 stated to be £218,000, expenditure £188,000; the expenditure for many years has exceeded the revenue, deficits being covered

by loans. Foreign debt about £5,400,000, arrears of interest (about £5,000,000) not included. The loans were raised for the purpose of constructing an inter-oceanic railway, but a small proportion only was expended for this purpose. Army nominally about 32,000, including reserves. Prolonged civil strife, aggravated by wars with San Salvador and Guatemala, from 1870 to 1876, when exhaustion brought peace. Since 1880 affairs more peaceable. In 1871 Omoa was bombarded by the British, to obtain redress for injuries inflicted on their subjects. In 1881 similar complications with France were settled by compensation, etc. —**NICARAGUA** is governed by President, Senate, and House of Representatives, elected by universal suffrage. Area 49,500 square miles. Population about 276,000. Revenue in 1884 about £380,000; expenditure about £360,000. Public internal debt about £190,000; no foreign debt. Army about 10,000, including police and militia. Scheme for inter-oceanic canal revived in 1879. The treaty by which United States took power to construct the same, objected to by England in 1884. United States legislature finally refused ratification (January 1885). —**SAN SALVADOR** is governed by President, Senate, and House of Representatives, elected respectively for four years, three years, and one year, by married men, or those who can read and write and support themselves. The elections are, however, frequently interrupted by pronunciamientos or military nominations. (See PRONUNCIAMIENTO.) Area 7225 sq. miles. Pop. about 555,000. Revenue in 1884 about £824,000; expenditure about £800,000. No foreign debt; home debt about £320,000, exclusive of floating debt about £334,000. Army, including militia, about 25,000. War with Honduras in 1872 and 1873. Since then little worthy of note has occurred.

Central Asia. A convenient geographical and political designation for the region lying between the Russia of Nicholas and India, which was practically rendered obsolete when Merv was annexed, in 1884. The region in question, with the exception of a few outlying districts, was formerly known as Tartary; but when the Russians began their onward movement towards India after the Crimean war, the general term of Central Asia came into vogue, and on account of its convenience has since been employed. Central Asia is not situated in the middle of the Asiatic continent, but well to the west, so that the title is not an accurate one; it has, however, served its purpose, and the use of it is being reluctantly abandoned by the press. By many writers the term has been restricted to the territory remaining unabsorbed, after each Russian advance, between the Russian frontier and Afghanistan. First the Kirghiz deserts disappeared from it, then Khokand, afterwards Bokhara and Khiva, and finally the country of the Turcomans. The majority of writers have never included Persia and Afghanistan in Central Asia; and Kashgaria has been excluded since it was reconquered by the Chinese. The Russians have divided the conquered region into two provinces—**Turkestan** and **Transcaspia**. The former embraces the Kirghiz deserts, the old khanate of Khokand, the country conquered from Bokhara, and in addition it controls the vassal states of Bokhara and Khiva. This part of Central Asia is the more familiar to the public, on account of the campaigns of Tcherniaeff and Kaufmann,

and the travels of Vambéry, Burnaby, Schuyler, etc. Until the death of Kaufmann, in 1882, it was the most important section of Central Asia, but subsequent events have transferred political interest to Transcaspia. Russia, on her part, has also diminished the administrative importance of Turkestan by various reductions, and by forming the Semiretchinsk part into a separate "government of the Steppe." The Tourgai district of the Kirghiz Steppes has also been erected into a separate government. The capital of Turkestan is Tashkent, the present Governor-General being General Rosenbach. The second province into which Central Asia has been split—Transcaspia, or the Transcaspiian territory—is quite of recent origin. It consists of the East Caspian coast, from the Mangishlak peninsula to the river Atrek, and the country inland to the oases of Khiva and Merv, the southern boundary being the Persian frontier as far as Sarakhs, and the Afghan frontier from Zulfikar to the Oxus. The whole of this large area, for the most part composed of desert, belonged to the independent Turcoman tribes. The first attempt to conquer them was made in 1869, when General Stolietoff landed a force at Krasnovodsk; but the Russians made no headway against the fiercer tribes until Skobeleff was sent in 1880 to retrieve the disastrous defeat which General Lomakin had experienced at Geok Tepé the previous year. After a hard but decisive campaign Geok Tepé was besieged and stormed (January 1881), and with the pacification, or rather semi-extirmination, of the Akhal Tekkés, the Turcoman barrier virtually collapsed. In 1882 the Tejend oasis was occupied, and in 1884 Merv was forced to yield. These successes settled the fate of the Turcoman part of Central Asia, and the Russian Government formed the conquered territory into a separate province, to which was given the title of "**Zakaspie**," or "Transcaspia"; Askabad being chosen as the administrative centre, and General Komaroff (*q.v.*) as the first Governor. It should be noted that this part of Central Asia has all along had little in common with Turkestan, the latter being conquered and ruled by the officials and troops of the Orenburg district, and the Transcaspiian territory by those of the Caucasus. Any further extensions of territory can now only be made at the expense of Persia or Afghanistan, all Central Asia being swallowed up. As England does not concern herself with the territory Russia has once annexed, but only with that which she aspires to conquer, there is thus no longer a Central Asian question. In its place are the Russo-Persian and Russo-Afghan problems, and as a general designation for the Russian advance the "**Russo-Indian question**" has come into use; but the public have grown so familiar with the expression "**Central Asian question**" that the term will for some time probably continue to be employed.

Central News Agency and Central Press. See NEWS AGENCIES.

"**Century Magazine**," originated November 1881, previously existed under the name of *Scribner's Monthly*, which was edited by Dr. Holland. Present editor Mr. Richard Watson Gilder. The magazine, which has a large circulation in America and England, contains one or more serial tales, with articles on travels and subjects of general interest by eminent writers, profusely illustrated with excellent

engravings (price 1s. 4d.). *St. Nicholas*, an illustrated magazine for the young (monthly 1s.), is published in connection with the above, and is edited by Mrs. Mary Mapes Dodge.

Cesarewitch Stakes. See RACING.

Cetewayo (pr. Ketchwayo) was son of Panda, king of the Zulus. During Panda's latter years Zululand was distracted by rival ambitions of his sons. In 1861, Mr. (now Sir) Theophilus Shepstone was sent into the country. He induced the Zulus to recognise Cetewayo as Panda's successor, and Cetewayo ruled as a sort of regent until his father's death, in 1873, when, at his own request, he was crowned by Mr. Shepstone, representative of the Natal Government. He immediately proceeded to rule his people with atrocious severity, in spite of the obligations into which he had entered. He maintained an army of thirty thousand men, formed into two groups of regiments, one of unmarried and one of married men, an organisation founded by King Chaka in 1813. In 1877, after British annexation of the Transvaal, an old dispute between the Zulus and the Transvaal Boers regarding lands on the frontier, became transferred to the British. Arbitration was agreed to, and Sir Bartle Frere, as High Commissioner, awarded the disputed territory to the Zulus. But conditions were imposed on Cetewayo, among them being a requirement that he should abolish his military system. These demands not being complied with, Lord Chelmsford, in January 1879, entered his territory with the British troops. In July the war was ended by the battle of Ulundi, and the chiefs and people everywhere submitted. Cetewayo was made prisoner and taken to Cape Town. His dynasty was deposed, and Zululand divided into thirteen chieftainships, under a British Resident. He was afterwards sent to England. In 1882 he was conditionally restored to a part of his dominions, a large extent being constituted a native reserve under a British Commissioner. In 1883 Cetewayo was driven out of his dominions by the chief Usibepu. He took refuge in the Reserve, where he remained an exile, under the protection of the British Resident, until his death in 1884.

Chaldeæ. See BIBLICAL ARCHÆOLOGY.

Challamel-Lacour, Paul Armand, French politician and statesman, b. 1827 at Avranches, in the Department of the Manche. He was educated at the Saint-Louis Lyceum and the Normal School, where he distinguished himself, and graduated in philosophy in 1849. He was afterwards Professor of Philosophy in the Lyceums at Pau and Limoges. After the *coup d'état*, banished by Napoleon III., he went to Belgium, and to Switzerland. In the latter country he was appointed Professor of French Literature in the "Polytechnicon" at Zurich. In 1859 he returned to Paris, and founded, with Gambetta and a few friends, the *Revue Politique*. He became Prefect of Lyons at the Revolution of 1870. In 1872 he was returned a member of the Chamber of Deputies for the Department of the Bouches-du-Rhône, and elected senator (1876) for the same Department. M. Challamel-Lacour was French Ambassador in London from June 1880 to Feb. 1882. In 1883 he became Minister for Foreign Affairs in the cabinet of M. Ferry.

Chalons. See FRANCE.

Chamberlain, The Rt. Hon. Joseph, P.C. M.P. for West Birmingham, b. in London, July 1836. Educated at University College; and

in 1854 his father joined the firm of Nettlefold, the well-known wood-screw makers of Birmingham. He also, in course of time, joined the firm, and for many years devoted himself almost exclusively to business, his spare time being given up to the study of politics. His first introduction to public life was in 1870, as one of the leaders of the defeated secular candidates for the School Board of Birmingham. But in 1873 Mr. Chamberlain was elected chairman of the Board. During this period he was also a member of the Town Council, and was elected Mayor (1873). His tenure of office was remarkable for the expeditious despatch of the corporate business. On the death of his father he retired from the firm, in order to devote all his energies to public life. To him also was due the transfer of the gas and water works to the borough authorities. He opened a sanitary exhibition in the town, and was the author of the improvement scheme which has entirely transformed the face of central Birmingham. He was re-elected Mayor in 1874, and again in 1875. In 1874 he opposed Mr. Roebuck in Sheffield, but was defeated by a large majority. About this period his name was brought prominently before the public by several articles he wrote for the *Fortnightly Review*, promulgating very advanced political and educational views. He was chairman of the Education League, and a member of the famous Liberal Association nicknamed later on "The Caucus" (*q.v.*), though not so closely identified with its origin and growth as is popularly supposed. In 1876, on the retirement of Mr. Geo. Dixon from parliament, Mr. Chamberlain was elected for Birmingham without opposition, and has represented the town ever since. From 1876 his career is to be traced in parliament and on the public platform. He scarcely opened his lips during the session of 1876, but in 1877 he laid before the house an exposition of the Gothenburg licensing system, which he had personally seen in operation in Sweden. His advocacy of the scheme, however, produced no impression upon members, and Mr. Chamberlain never revived the subject. At this period he sat below the gangway, among the Home Rulers, with whose aspirations he was supposed to have some sympathy. He was an unsparing critic of the Government, his most memorable attacks being made upon Lord Hartington and Mr. Gladstone, whose proposal to abolish the income tax (1874) he censured severely. Mr. Chamberlain's career in opposition was not a marked success, but he was acknowledged as the leader of the Radical party, and much of the Liberal success at the general election of 1880 was due to the organisations established all over the country on the model of that in Birmingham; and when the Liberals returned to power at the head of a large majority, it was felt that ministerial distinction should reward the man whose influence had not a little aided the victory. Mr. Gladstone offered Mr. Chamberlain, who was the only leader of the advanced party who received a cabinet appointment, the Presidentship of the Board of Trade, with cabinet rank. Mr. Chamberlain worked hard at this department of work. He passed a Patents Bill, and a Bankruptcy Bill (*q.v.*), but an attempt to grapple with the question of merchant shipping was met by a formidable and successful opposition. Mr. Chamberlain, during the land agitation in Ireland, did not take such a prominent part in the debates as

was expected from a man who was believed to have strong sympathies with the minor objects of the Irish members. Nor when great foreign questions were being discussed did he often enter the arena of debate. But whenever he spoke he went straight to the point, and early acquired a reputation as a hard hitter, and stands in the front rank of public speakers. On his exit from office (1885) he increased his reputation as a political leader considerably more than during the three previous years, his freedom from office giving him greater latitude; and he attacked Conservatives and Whigs with almost equal bitterness. He made a political tour in Scotland, and by his remarks on disestablishment there raised a storm which had doubtless much influence on the general election. At Victoria Hall, in London, he declared that he would take no post in any government which did not include in its programme free schools, and the creation of small tenants and yeomen farmers. This speech created a great sensation, and was looked upon as a direct challenge to the Whig element of the Liberal party. Mr. Chamberlain was elected for Birmingham at the general election of 1885, along with six Liberal colleagues. He held the office of President of the Local Government Board until his divergence of views on the Irish policy of Mr. Gladstone caused his resignation (March 27th, 1886).

Chamberlain, Mr. Richard, M.P., of Oak Mount, Edgbaston, Birmingham, younger brother of the Rt. Hon. J. Chamberlain (*q.v.*), was b. 1840. Educated at London Univ. Sch. Mayor of Birmingham (1879). Returned in the Liberal interest as member for West Islington (1885).

Chambers, Montagu, Q.C., d. Sept. 18th, 1885, in the 86th year of his age. He obtained a commission in the Grenadier Guards in 1815. He was called to the bar in 1828. In 1852 he was returned as M.P. for Greenwich. He subsequently sat for several years (from 1866 down to 1874) as one of the members for Devonport.

Chambezi River. See CONGO FREE STATE.

Chambord, Comte de. See FRANCE.

Chambord, Comtesse de, eldest daughter of Francis V., Duke of Modena, was b. 1817. Married the late Comte de Chambord (d. Aug. 24th, 1883), the claimant to the French throne. Died at Görz March 25th, 1886.

Championship of England, The, is a very ancient office, said to have been instituted by William I. It has been in the family of Sir John Dymoke from the coronation of Richard II. (1377), when it was decided against another claimant of the post in favour of him as lord of the manor. The duties of the Champion consist only in appearing at a coronation, openly challenging a denial of the monarch's right and title to the throne, and holding combat with the denier of such right.

"**Champfleuray.**" See NOMS DE PLUME.

Champollion, M., the younger. See BIBLICAL ARCHAEOLOGY and EGYPTOLOGY.

Chance, Mr. Patrick Allan, M.P., was b. 1857. Educated at the Univ. High Sch., Dublin, and the Catholic Univ. He became a solicitor (1882). Returned as a Nationalist for South Kilkenny (1885).

Chandavarkar, Mr. See INDIAN DELEGATES.

Channel Islands, consist of the bailiwicks of Jersey and Guernsey, the latter including Sark, Herm, and Alderney, together with Jethou, Le Marchant, and the Caskets. They

have belonged to England since the Norman Conquest. At the period of the Reformation they became Protestant, being attached to the diocese of Winchester. The islands are under a governor appointed by the Crown, but have their own constitution, which has existed with but little alteration since the thirteenth century. Both Jersey and Guernsey (with its dependencies) have each a lieutenant-governor and a bailiff, who presides over the States of Deliberation, and is nominated by the Crown. The States of Deliberation consist of the rectors, judges, and constables who are elected in Guernsey by the "States of Election" (composed of 222 ratepayers). Guernsey has ten and Jersey twelve parishes. The official language of the courts is French. (For fuller account see Ansted's "Channel Islands," and Inglis' "Channel Islands.")

Channing, Mr. Francis Allston, M.P. Educated at Liverpool and Univ. Coll., Oxford, obtaining classical and mathematical honours, the Chancellor's English Essay prize, and the Arnold Historical prize; gained an open Fellowship at Univ. Coll. Returned in the Liberal interest as member for East Northamptonshire (1885).

Chanzy, Antoine Eugène Alfred. French general and senator. On Oct. 20th, 1870, he was placed by the Government of National Defence at the head of the army of the Loire, when he displayed in his resistance to the German army under the command of Prince Frederick Charles the highest military qualities. Chanzy was returned to the National Assembly on Feb. 8th, 1871, for the Department of the Ardennes; June 11th, 1873, he was appointed Governor-general of Algeria, and elected senator Sept. 10th, 1875. He was appointed ambassador of France to the court of Russia, Feb. 18th, 1879. He was successively promoted in the Order of the Legion of Honour: Knight, July 16th, 1852; Officer, Dec. 26th, 1860; Commander, June 2nd, 1870; Grand Officer, Dec. 2nd, 1870; Grand Cross, Aug. 22nd, 1878; died Jan. 4th, 1883.

Chaplin, Rt. Hon. H., P.C., b. 1840, son of the late Rev. H. Chaplin, was educated at Harrow, graduated at Oxford, was elected to parliament in 1868 for Mid-Lincolnshire in the Conservative interest, and took a high place among the representatives of county and agricultural interests. He was appointed Chancellor of the Duchy of Lancaster in the late Salisbury administration. Mr. Chaplin was returned for the North Kesteven Division of Lincolnshire at the recent election.

Chapter. See DEAN AND CHAPTER.

Charcoal Respirator. See FIRE EXTINCTION.
Chardin and Prayer's Microtelephone. See MICROPHONE.

Chargé d'Affaires. See CONSUL.

Chargés d'Affaires. See AMBASSADORS.

Charity Organisation Society, The, was established with the object of improving the condition of the poor—(1) by bringing about co-operation between the charities and the poor law, and amongst the charities; (2) by securing due investigation and fitting action in all cases; and (3) by repressing mendicancy. The Right Rev. Dr. Temple, the present Bishop of London, has succeeded his predecessor in the office of president; and there is a very influential list of vice-presidents, headed by H.R.H. the Princess Louise (Marchioness of Lorne), and including Mr. Gladstone, the Marquis of Salis-

bury, the Earl of Derby, the Dukes of Norfolk, Northumberland, and Westminster, and several prominent politicians belonging to both political parties. The Society consists of a federation of district committees, one or more in each of the poor-law divisions of the Metropolis, and of a central council at which every committee is represented. The principle upon which these local committees act is to refuse to give small weekly doles of food or money, on the ground that such a mode of relief undermines the independence of the recipient. In suitable cases they give assistance in the form of loans with proper security for repayment. They are ready, also, if adequately supported by their district, to give substantial assistance of other kinds when it seems probable that this will raise recipients to a condition of independence. The primary objects of the committees are to afford charitable institutions and individuals an easy means of exchanging information, to prevent unconscious overlapping of relief, and to secure the investigation of cases with a view to referring them to the most suitable quarter for assistance. The mode and extent of the investigation carried on as to the antecedents of persons seeking relief have raised strong opposition to the Society in some quarters, and at the last annual meeting, at Willis's Rooms, there was some disturbance. It must, however, be borne in mind that this Society does not profess to be primarily a relief society. Its own funds are primarily applicable to the purposes of organisation, investigation, and advising, and it only undertakes relief when no extraneous aid is to be got for a case that requires it. The council also investigates cases of begging-letter writing. Money can be sent to the Society for any special purpose, and be used for that purpose only. If sent for the general funds it helps to provide the means of learning the cause of distress in applications for assistance, of searching out the best kind of help, and of detecting imposture. In an appeal recently issued, signed by the Bishop of London and the Duke of Westminster, it is stated that the plan of co-operation in charity which the Society has created for purposes of information and for mutual help among societies and almsgivers is steadily making way, and the earnestness with which the Society has upheld and enforced the personal obligations of the almsgiver to lift up and better the life of the distressed was bearing fruit in an increased sense of the responsibility of almsgiving, and in a wiser and more unselfish beneficence. There are now forty district committees within the metropolitan area. Two new committees were established during the year (1885), at one of which all the work of inquiry was undertaken by members of the committee. In the poorer parts of London the district committees form centres available at any time of exceptional distress; and they are, it is stated, increasingly useful in bringing many who were in trouble such ample and effectual relief as would otherwise be entirely out of their reach. For instance, the relief obtained and disbursed by the Poplar Committee amounted in 1878-9 to £510, but in 1884-5 to £1,266; the figures of the Lambeth Committee (who have besides sent out into the country a large number of children in connection with the Country Holiday Fund) are for the same years £348 and £773. Last year the district committees dealt with 21,442 families, and they obtained (besides grants amounting to £3,500) £13,590 for 11,086 families,

whom they found that they were able to assist satisfactorily with material help. The convalescent committee provided convalescent accommodation for 2,036 persons in 103 homes, and 80 they boarded out. The medical committee, which has recently undertaken a plan for the prompt supply of surgical apparatus, besides promoting other mutual help between medical and general charity, furnished 715 instruments under the direction of surgeons at the leading metropolitan hospitals. The organ of the Society is the *Charity Organisation Reporter*, and a monthly *Review* and other papers are issued. The central office is at Buckingham Street, Adelphi, Strand.

Charlemont, James Molyneux Callfield, 3rd Earl of (creat. 1763); b. 1820; succeeded his uncle 1863. M.P. for co. Tyrone (1847-57).

"Charles I." See IRVING, HENRY.

Charles I. (Charles Frederick Alexander), King of Württemberg, b. 1823. He succeeded his father William I., and ascended the throne in 1864. In the Austro-Prussian war, he fought on the side of Austria. In 1866 he acknowledged Prussia as the head of the North German Confederation, and signed a treaty of offensive and defensive alliance with that power. In the Franco-German war (1870-71) King Charles joined the other German armies, and played an active part in the struggle. He is connected with the Russian Imperial family by his marriage (1864) with the Grand Duchess Olga Nicolajewna, daughter of the Czar Nicholas I. He is an officer in the Russian army holding the rank of Colonel of dragoons.

Charles I. (Charles Eitel Frederick Zepherin Louis), King of Roumania, b. 1839. His father was Prince Hohenzollern Sigmaringen. When (in 1866) Prince Alexander John had been expelled from the sovereignty of Roumania, King Charles ascended the throne. He had formerly served as an officer in a regiment of Prussian dragoons. By a convention made with Russia, in 1877, the Muscovite troops were allowed to cross the Danube and invade Bulgaria; and in the war which ensued between Russia and Turkey, the King of Roumania sided with the Czar, becoming military commander of the Army of the West. In 1861 the Roumanian representatives unanimously proclaimed him King of Roumania; he had previously borne the title of Prince. During his reign the Jews have been much persecuted. His Majesty wears the Russian cross of St. George, which he received at the hands of the Emperor Alexander II. In 1869 he married the Princess Pauline Attilie Louise of Wied, a lady of literary capacity, who writes under the *nom de plume* of "Carmen Silva."

Charrington, Mr. Spencer, M.P. Partner in the firm of Charrington, Head, and Co. brewers. Returned in the Conservative interest as member for Mile End (1885).

"Chartist Parson, A." See Noms DE PLUME.

Charts, Weather. See METEOROLOGY.

Chasidism. See JEWS.

Chaworth, Baron. See MEATH.

Cheese. See DAIRY FARMING.

Chelmsford, Frederic Augustus Theiger, 2nd Baron (creat. 1858); b. 1827. He has the medal and clasp for service before Sebastopol; served against the mutineers in Central India; appointed acting deputy-adjutant-general of Queen's troops at Bombay (1861); proceeded to Abyssinia as adjutant-general (1867-8); served throughout the Abyssinian campaign, and was favourably mentioned in the despatches; was

aide-de-camp to the Queen and adjutant-general to the forces in India (1868-76), when he was made a brigadier-general, and to command first infantry brigade at Aldershot; commanded the forces in Kaffir war (1878), and in the Zulu war (1879); appointed (1878) Lieut.-Governor of Cape of Good Hope; resigned (1879); lieutenant-general (1882); Lieut. of the Tower (1884). The first Baron was twice Lord High Chancellor of Great Britain.

Chemical Energy. See ATOMS AND MOLECULES; also HEAT.

Chemical Equation. See ATOMS AND MOLECULES.

"Chemical News." See CHEMISTRY.

Chemical Society, Monthly Journal of. See CHEMISTRY.

Chemical Soils. See MANURES.

Chemistry treats of the separation of matter into its component parts (*Analysis*), and of the formation of different kinds of matter from its component parts (*Synthesis*). Analysis may be *proximate* or *ultimate*; thus, the proximate constituents of milk are water, sugar, fat, etc., while its ultimate constituents are carbon, nitrogen, oxygen, hydrogen, sulphur, etc. Bodies which have not yet been decomposed into simpler ones are called *elements*. About seventy elements have been discovered, but very little is known about the rarest of these. Certain masses (weights) of these elements are found to unite together as if they were indivisible units or *atoms*; thus, hydrogen unites with eight times its mass of oxygen to form water, but with three times its mass of carbon to form fire-damp; and when carbon unites with oxygen to form carbonic oxide or carbonic acid, the masses which do so are in the proportion of 3:8 or of 3:2×8. In other words, an atom of carbon unites with one or with two atoms of oxygen. From such facts as these chemists have deduced what they consider to be the relative masses of the atoms of the various elements; these they call *atomic weights*. If the elements are arranged in vertical columns in the order of their atomic weights, a given number being placed in each column, there is a very strong resemblance between those which fall in the same horizontal line. This is called *Mendeleeff's Law of Periodicity*. The synthesis of carbon compounds has been much studied of late years; the artificial production of such complex bodies as alcohol, tartaric acid, oxalic acid, etc., was followed by other remarkable synthetical discoveries, such as the production of alizarine and of indigo, which had a great effect in justifying the processes of reasoning which led chemists to these astonishing results. Their reasoning was founded upon the assumption that, while a compound consists of certain numbers of atoms of the elements composing it, these atoms are bound together in a particular way and any alteration in their arrangement causes an alteration in the properties of the compound; moreover, that while an atom of some elements (e.g. chlorine) will combine with only one atom of hydrogen, an atom of other elements will combine with two, three, four, and so on. The *atomicity* or *valency* of an element is therefore said to be 1, 2, 3, 4, etc. Hence, it is usual now-a-days to represent the composition of a body by a *constitutional* or *rational* formula. The *nomenclature* of chemistry appears to the uninitiated to be very troublesome; but it is scientific, and, given a knowledge of a few technical details, it is

easy to deduce from the name the composition of a body hitherto unheard of. The old subdivision of chemistry into *organic* and *inorganic* is now obsolete; compounds once thought to be producible only by organised beings can be manufactured in the laboratory. If these terms are used now, it is only in the sense of "Chemistry of carbon-compounds and of other compounds." The chief chemical discoveries in England and elsewhere are recorded in the *Monthly Journal of the Chemical Society*, which can be obtained by annual subscribers; the *Chemical News*, also, edited by William Crookes, is a weekly periodical of long standing.—Facts unconnected with analysis and synthesis, however interesting to a chemist as enabling him to recognise a substance when obtained, or for other reasons, are not chemical facts; they belong to the science of *Physics*. Thus, the recent liquefaction of air and of other so-called permanent gases was the achievement of physicists, not of chemists; and the discovery caused no alteration in our views of the chemical nature of those bodies.

Chérif Pasha, statesman, b. at Constantinople, of an old and noble Mussulman family. He studied at Paris as a pupil of the Egyptian Mission maintained in France by the Egyptian Government, and passed through the Military School of Saint-Cyr. He returned to Egypt in 1844. At the accession of Saïd Pasha he entered the army, and was successively promoted to the rank of Pasha. In 1857 he entered the administration, and became Minister of Foreign Affairs. Under the Government of Ismail Pasha he filled the posts of Minister of the Interior, Foreign Affairs, and Public Instruction. In 1867 he was raised to the post of President of the Grand Council of Justice. In 1868 he took the portfolio of the Interior, with the Presidency of the Council of Ministers. In 1865, 1867, 1868, he was made Regent of Egypt by Ismail Pasha, when this Prince went abroad. Under the government of Tewfik Pasha, Chérif Pasha became Prime Minister of Egypt, but resigned (1884), in consequence of his disapproval of the abandonment of the Soudan. He is a Grand Officer of the Legion of Honour.

Chesham, Charles Compton William Cavendish, 3rd Baron (creat. 1858); b. 1850; succeeded his father 1882.

Chester Meeting. See RACING.

Chester, Right Rev. William Stubbs, 32nd Bishop of (founded 1841); b. at Knaresborough 1825. Educated at Ripon Grammar School and Christ Church, Oxford, where he graduated B.A. with honours (1848); elected Fellow of Trinity the same year; ordained deacon (1850); was Regius Professor of Modern History at Oxford (1866-84); Canon Residentiary of St. Paul's (1879-84); Bishop of Chester (1884).

Chesterfield, Henry Edwyn Chandos Scudamore Stanhope, 9th Earl (creat. 1628); b. 1821; succeeded his kinsman (1883). The 4th Earl was the celebrated Lord Chesterfield.

Chetwynd, Mr. George, C.B. See POSTAL ORDERS.

Cheyne, Commander. See BALLOONING.

Chichester, Henry Thomas Pelham, 3rd Earl of (creat. 1801); b. 1804; succeeded his father 1866; d. March 15th, 1886. For many years President of the Church Missionary Society.

Chichester, Walter John Pelham, 4th Earl of (creat. 1801), was b. 1838; succeeded his father March 15th, 1886. Formerly M.P. for Lewes.

Chichester, Right Rev. Richard Durnford, D.D., 71st Bishop of (founded 1082); b. at Sanddelford, Berks, 1802. Educated at Eton and at Magdalen College, Oxford, where he was first class in classics (1826) and gained a fellowship; ordained (1830); rector of Middleton, Lancashire (1835); canon of Manchester (1868); Bishop of Chichester (1870).

Childers, Rt. Hon. H. C. E., P.C., b. in London 1827, was educated at Cheam School and Trin. Coll., Cambridge, where he graduated in 1850. Immediately after, he proceeded to Australia, and became a member of the Victoria Government from his arrival until 1857; having held the office of Commissioner of Trades Customs in the first cabinet, and member for Portland in the legislative assembly, in 1857 he returned to England as Agent-General for the colony, and three years later became member for Pontefract. His knowledge of the Colonies was brought into service on his appointment as chairman of the select committee on transportation in 1861, and member of the commission on penal servitude in 1863. In 1864 he became a Lord of the Admiralty, and Financial Secretary to the Treasury 1865, and in 1868 First Lord of the Admiralty on Mr. Gladstone's return to power. In 1871 ill health compelled him to resign his office, but in 1872 he was a second time appointed Agent-General for Victoria. In 1880, under Mr. Gladstone, Mr. Childers was Secretary of State for War until 1882, when he was appointed Chancellor of the Exchequer, on the resignation of that office by Mr. Gladstone. Mr. Childers resigned office when the Gladstone ministry fell (1885). In the late general election he failed to secure a seat, but was returned for South Edinburgh (Feb. 1886), in succession to Sir G. Harrison deceased. Mr. Childers holds office as Secretary of State for the Home Department.

Chili. A republic governed by a President elected for five years, to whom the executive power is confided, and a Senate and Chamber of Deputies, who form the legislature. The Senate, of 37 members, is elected by the provinces for six years; the Chamber, of 109 members, by the departments for three years, by electors possessing a small property qualification. The Roman Catholic is the state religion, but all others are tolerated; universal and gratuitous education is given at the national charge. Area 256,399 square miles; population in 1882 about 2,272,000; revenue in 1885 £7,329,000; expenditure about £6,903,000; debt in 1884 about £17,500,000. By law the army is not to exceed 12,400, but in 1884 about 17,000 of the national guard were on duty to assist the regulars. The navy consists of four armour-clad and about thirty other vessels of all sorts. In April 1879, in consequence of disputes as to the boundaries of the respective states, the allied republics of Peru and Bolivia declared war against Chili. In May a severe action took place between two Chilean wooden vessels and the Peruvian iron-clads *Huascar* and *Independencia*. One of the Chilean ships was sunk by the *Huascar*; the *Independencia* being wrecked while in pursuit of the other. In the following October the *Huascar* was captured by the Chilean fleet after a gallant resistance. In November the combined army of Peru and Bolivia was defeated with great loss at Iquique; after this the Bolivians took but little part in the war for some time. Great agitation arose at Lima in Decem-

ber, and Pierola was appointed dictator of Peru in June. In May 1880 the Peruvians were totally routed at Tacna, and in June the southern army of Peru was exterminated at Arica. The Chilians then threatened Lima by sea, and a *levée en masse* took place. Negotiations were attempted, but without result, owing to the exorbitant terms of peace demanded by Chili. In November 1880 the Chilian army landed at Pisco, and in January 1881 the Peruvians were totally defeated near Lima, which was shortly afterwards occupied without resistance. After their defeat, and before the arrival of the Chilian troops, the state of anarchy was so great that the foreign residents, to the number of 5000, took arms to restore order. The country relapsed into a state of anarchy, and a guerilla war dragged on in 1881 and 1882, always to the disadvantage of the Peruvians. After various unsuccessful attempts at negotiation, in 1883 the invaders recognised Iglesias, who had been elected provisional president by the northern states, and a treaty involving the absolute cession of Tarapaca, with its nitrate deposits, and the occupation of Arica and Tacna for ten years, etc., was provisionally agreed to in June. About this time also, after seventeen years of interrupted relations, a treaty of peace between Spain and Chili was signed. After a considerable period of civil war and anarchy, a constituent assembly was convened, which confirmed Iglesias in the presidency, ratified the above-mentioned treaty, and established a government, which was recognised by England, France, Spain, etc. In spite of insurrections against the new government, which rendered the prolongation of the Chilian occupation necessary, internal peace seems likely to be restored in Peru. In Chili proper since the close of the war nothing worthy of note has occurred.

"Chiltern Hundreds." See PARLIAMENTARY PROCEDURE.

China. The most populous and, excluding Siberia, the largest empire in Asia. China Proper still more remarkable as the most compact nationality in the world; 1,550,000 sq. miles, with a pop. variously estimated from 250,000,000 to 350,000,000—the higher figures being a moderate computation, and 70,000,000 less than the returns of 1842. The rest of the empire, covering 3,000,000 sq. m., contains not more than 30,000,000 souls. China has other claims to rank high in the family of nations besides her extent of territory and the multitude of her people. The industry of the latter and the antiquity of her history afford valid reasons for placing this country high among the nations of the earth. The legendary history of China begins at a period anterior to the Flood; and **Hia**, the first emperor of the **Yu** dynasty, emerges from the region of fable with some distinctness about the year 1990 before our era. The obscurity shrouding the earlier period is explained by the destruction of the books and literature of China in the third century before Christ by the Tsin emperor **Hwangti**, who is more honourably known to fame as the constructor of the great wall of China, one of the so-called wonders of the world. The **Tains** derived their reputation chiefly from the deeds of this ruler; but their successors, the **Hans** (B.C. 202—A.D. 220), exercised a more important and more durable influence upon the national character and history, which may be realised from the Chinese calling themselves to this day "children of Han."

Numerous other dynasties followed, of which the most important were the **Tangs** (a great family which ruled from Singan, a magnificent city in the west of China, during the zenith of its power), and the **Sungas**, who were overcome by the Mongols under Genghis Khan and his sons. Kublai Khan completed the conquest which his grandfather Genghis began, and established the Yuen dynasty at Pekin or Cambaluc in the year 1260. The **Mongols**, or **Yumans**, ruled but a brief space after the death of this illustrious prince, and in 1368 they were displaced by the **Mings**, who were native Chinese. The Mings governed for nearly three centuries, down to 1644, but the last thirty years of this period were passed in a continual but unsuccessful struggle with the Tartars of Manchuria. The **Manchus** overcame all opposition by the year stated, but another forty years was employed in the pacification of the country by the overthrow of the forces of Wou Sankwei in the south-west, and by the conquest of Formosa. **Wou Sankwei** was a remarkable general, who had first invited the Tartars into the country, long contributed by his talents to their success, and finally ended his career with arms in his hands against their authority. The Manchu conquest was consolidated by the genius of the two emperors **Kanghi** and his grandson **Keen Lung** two of the ablest sovereigns who ever sat upon a throne. Between them they established the imperial authority in Thibet, Kashgaria and Mongolia. The prosperity of the country throughout the eighteenth century, shown in the extraordinary increase of population and wealth, furnished the best proof of the efficiency of their administration. After Keen Lung's retirement, in 1796, a marked decline in the vigour of the government ensued, and although forty years elapsed before this deterioration in power was made palpably evident, several insurrections in the more remote portions of the empire prepared the way for the humiliating events of the first foreign war in 1842. The brief struggle between England and China closed with the **treaty of Nankin**, which opened the five ports of Canton, Amoy, Foochow, Ningpo, and Shanghai to foreign trade. But China, although beaten, was far from being humbled; and when Hienfung succeeded Taoukwang as emperor, he easily forgot the bitter experience of his predecessor. The difficulty about opening the gates of Canton preceded the **Arrow** case, and a long period of disagreement between the governments prepared the way for the second trial of strength, which began in 1856 and did not conclude until the end of 1860, with the entry of the allied forces of England and France into Pekin. From that time to the present, with the exception of the war with France, which was localised to Tonquin and Formosa, China has been at peace with all European powers. Her military operations have been confined to her own territory. The **Taiping** rebels devastated the fairest part of China, and were not overcome until General Gordon broke their power in Kiangsu and enabled the Chinese commanders to recover Nankin. The **Panthay** revolt in Yunnan was not finally suppressed until 1874. The insurrection of the **Tungani** in the north-west was put down, so far as China Proper was concerned, about the same time, and the subsequent campaigns of 1876-7-8 resulted in the recovery of the whole of Eastern Turkestan. These triumphs were rendered

complete by the restoration of Kuldja in 1881 by Russia, in accordance with the terms of the treaty of St. Petersburg. The credit of these achievements must be divided between the two ministers Li Hung Chang (*q.v.*) and Tao Tsung Tang, recently deceased, who have so vigorously supported the imperial authority during the minority of the boy emperor Kwangsu. Kwangsu may be expected to take over the personal government of his realm at the end of 1887. The government of China is most carefully organised. A number of boards or councils conduct business at the capital; while the eighteen provinces are divided among a certain number of governor-generals, who are assisted by governors of provinces and the "taotais" of the cities. A nineteenth province has been recently formed, out of the Central Asian territory, having its seat of government at Suidum, near the Russian frontier, in Semiretchia. The Manchu, or Tartar garrison, allotted to each important town, has a separate organisation, while the Green Flag Chinese army corresponds to our militia or the Turkish *redif*. The Manchu army is computed to number 270,000 men, and the Chinese as many as 800,000. The most efficient force is, however, Li Hung Chang's garrison of Pechihli, the nucleus of which was formed by the men who served under General Gordon against the Taepings. There are arsenals at Nankin, Shanghai, Tientsin, and other places, besides a dockyard at Kiangnan. The marine of China consists of the alphabetical gunboats, the steel corvettes built in Germany, and those constructed by Sir William Armstrong; while the fresh orders given at Stettin promise to double its numerical strength within a few years. The greater part of China is only very partially developed, and much benefit is anticipated to native and foreign trade by the introduction of railways, to which the Chinese government seems at last to have reconciled itself, provided always that it is not expected to move too fast. A commission representing the principal German houses has left for China; but its main object is to secure railway concessions rather than to negotiate a loan. It is not likely to succeed, for the Chinese are resolved to drive hard bargains and to have the spending of their own money. Li Hung Chang is personally as favourable to Englishmen as he is to Germans, and in the matter his influence will probably be supreme. (See CHINESE LOAN, New). At the same time Chinese trade is not increasing in the degree that might be expected from the awakening that seems to be taking effect among its long torpid masses. Caution rather than eagerness should be shown in hastening the progress of a people whose energy and industry once utilised must disturb the present equilibrium of the eastern world. The foreign trade of China is now nearly £48,000,000 sterling, and the imports slightly exceed the exports in value. Ninety per cent. of the imports come from England and her possessions, and over seventy per cent. of the exports are sent to the same quarters. China has also a land trade with Tibet valued at half a million sterling, and one with Russia of more than double that amount. It is impossible to value the internal trade of this busy community, but there is as little doubt of its magnitude as of its standing in need of increased facilities of transport. The present quantity of China's trade is abso-

lutely insignificant, being only one-third that of the port of Bombay, as compared with the dimensions which it must sooner or later attain. The revenue of the empire exceeds £50,000,000 sterling in value, of which one-half is paid into the provincial treasuries in kind. The national debt is only £4,000,000, secured on customs of a greater annual value. A new agreement, dated July 18th, 1885, was entered into between Great Britain and China relative to the opium traffic and the prevention of smuggling. The English Commissioners are Sir Byron Brennan and Mr. Russell, who, with the joint commission, are shortly to commence their labours (*Times*, March 15th, 1886).

Chincha Island. See COOLIE.

Chinese Loan, New Great. No little sensation was caused in London on January 1st, 1886, when the announcement was made that arrangements had been entered into to raise the gigantic loan of £35,000,000 sterling for China, to provide armaments and railways. The news came to be published in the Metropolitan evening papers, by a somewhat circuitous route. The item was first supplied to the *Journal des Débats* by the London correspondent of that paper, and then by means of the Paris correspondent of the Exchange Telegraph Company it was conveyed to the London press. The original statement was that a syndicate had been formed of the representatives of three German firms, supported by the largest financial house in the British Metropolis; then it was reported that the German firms were Mr. Krupp, the *Deutsche Bank*, and the *Discount Company of Berlin*, and afterwards, that the issue would be made in London, by the *Messrs. Rothschild*. If this news was startling, the cry of warning raised in the *Times* of January 2nd, 1886, was ever more so. In a lengthy article under the heading "A Danger to English Manufacturers," a correspondent on that date supplied some further details as to the proposed manipulation of the loan. He stated that on January 7th three gentlemen, representing a powerful syndicate of German manufacturers and financiers, were to sail from Venice on board the P. and O. steamer *Lombardy*, for Shanghai. Backed up by the "first financial house in London," they were commissioned to propose to the Chinese Government to raise the above mentioned sum, on such terms as would barely pay expenses, the only condition on the other hand being that they should have the control of the purchasing of all articles required in Europe, for either railway or war materials. This precious scheme, it was added, met with so much approval from Prince Bismarck that he had put the services of the German diplomatic and consular officers at the disposal of the syndicate. The following were given as the names of the three emissaries: *Herr Eric* from the *National Discount Company*, which also owns the Dortmund steel works, a great factory of steel rails; *Herr Betzke*, from Mr. Krupp, whose steel and ordnance products are so well known; and *Herr Texter*, from the *Deutsche Bank*. The correspondent referred to also added that, owing to the unwritten law by which British Consular agents abroad rigidly held aloof from the business dealings of their fellow-countrymen with natives, even the great English banking corporations devoted mainly to Chinese business were without official support; at the same time complaints

had been made, in both China and Japan, that German officials had recently been acting as agents for their countrymen. He argued, therefore, that the position of the syndicate would be such as to scare away other "competition," while the money raised in England, the cheapest market, would to all intents and purposes be spent in Germany, to the obvious detriment of British manufacturers. This prospect was sufficiently grave to demand serious attention. However, other rumours had also been in circulation; one being to the effect that a certain Frenchman had obtained some valuable concessions or commissions in China, and had proceeded to the United States to float a grand railway scheme. At the time the above-named syndicate were supposed to have commenced their journey, it was well known that the Americans had financial agents at Peking looking sharply after business. On January 15th it was reported from Paris that a French syndicate had been formed, including the largest contractors, to contest the Chinese field with the Germans; on the same day a telegram appeared in the *Journal des Débats* from Berlin, stating that the three German representatives had been supplied with £20,000 "as preliminary expenses,"—and it was subsequently added that £5,000 was found by the *Deutsche Bank*, another £5,000 by the *Discount Company*, and the remaining £10,000 by *Mr. Krupp* and a few other large firms. The Bombay correspondent of the *Standard* telegraphed, January 24th, 1886, that according to communications from Peking the Chinese were disposed to reject the offer of the German Syndicate; the Government, it was stated, being dissatisfied with the execution of recent orders in Germany for ships and engines. He added that plans were being drawn up for a railway from Tientsin to Taku. Towards the end of January it was reported in England that a British officer had been commissioned to purchase arms for China.

Cholera is endemic in certain parts of India, especially in the district of Cuttack, Brahmputra, and the delta of the Ganges, where under certain conditions it assumes a malignant type, and is then liable to spread to other parts of the world, usually by the ordinary channels of commercial intercourse. It was unknown in Europe before 1829-30, and has never been known to originate spontaneously in that quarter of the globe. The first European country invaded was Russia, where at Orenburg it caused a severe epidemic in 1829, then spreading over Central Europe, and appearing at Sunderland, Newcastle and neighbourhood in 1831, and at London in the spring of 1832, whence it was conveyed by emigrants to Canada and America; spreading to Mexico, Vera Cruz, and Cuba, by Spanish communication it arrived at Madrid and Barcelona in 1834-5, and extended along the Mediterranean coast to Marseilles, Toulon, Nice, Genoa, and Naples, this part curiously having escaped the wave of infection in 1832. Western Europe was again visited by it in 1847, 1853, and 1865, this time arriving by way of Alexandria. England has since been free, but Germany suffered severely in 1873-5, and recently (1885) Spain and a part of France have experienced its influence acutely. Certain conditions, such as those furnished by the deltas and estuaries of great rivers and the tide of commercial intercourse, favour the spread of an epidemic; but

whatever may be the zymotic or molecular agent by which the infection is carried, the conjunction of it with sewage-sodden soil and fouled subsoil water, under certain atmospheric conditions, appears the most probable cause. Recent investigations point to the fact that it is a living organism deriving life from parents like itself, therefore capable of self-multiplication and existence, independently of the human body, for very considerable periods of time in low-lying ill-drained localities, where the surroundings are favourable to its vitality and development; so that the disease may be taken from that which has originally emanated from a cholera patient, although it is not directly contagious. This theory of the production of the disease adapts itself to the facts with less constraint than any other. *Dr. Koch*, in the seventh report of the German Cholera Commission (dated March 4th, 1884), says that in an epidemic occurring in Saheb Bagan, a small suburb of Calcutta, the "tank" from which the inhabitants derived their supply of water for drinking, bathing, and washing purposes was found to contain the "*Cholera bacillus*," previously discovered by him in Egypt in 1883. He found the first samples of this water were rather rich in this bacillus, whereas in those obtained at a later period, and near the termination of the epidemic, this characteristic bacillus was only found in very small numbers. It was ascertained that the linen of the first fatal case of cholera, smirched with the dejections, was washed in this tank. Seventeen deaths occurred among the hundred inhabitants. *Dr. Koch* contends that this affords very strong evidence of one way by which the poison of cholera finds entrance into the human body. *Dr. Koch* was deputed by the German Government to investigate the cause of the epidemic in Egypt in 1883; his research led him to assert that the "*materies morbi*" is a bacillus, having the form of a curved rod, hence called the "*comma bacillus*," and that the disease is caused by the multiplication of this organism in the small intestines. The fact of countless numbers being there present in persons suffering from cholera is now generally admitted; but *Dr. Klein*, who, with *Dr. Heneage Gibbs*, was appointed by the British Government to report on this subject, believes that, although these bacilli doubtless exist in the intestines of every cholera patient, they do not actually produce the disease; and did not hesitate to swallow some of them, without in his case any injurious result. This does not, however, prove that these organisms may not, after certain changes undergone in a suitable soil, be the means by which infection is spread; for there is no other way to account for the soil acquiring the morbid power, which it undoubtedly does possess, except through contamination by the discharges of the sick acting much in the same manner as the typhoid bacillus does in spreading that fever. This organism has never, like other specific germs, been found in the blood; consequently *Professor Pettenkofer* formed the opinion, since generally adopted, that multiplication does not take place in the tissues of the sick, but in his environment—*i.e.* in whatever material the germ finds fitted for its reception and fructification. Two factors are necessary for its increase—the organism itself, and a soil which is porous and abounding in decomposing organic matter; the introduction of a germ, therefore, into a well-drained and healthy locality would produce no

result, unless it found a suitable soil or other nidus; to cause infection it must be introduced into the body either by air, food or drink, contaminated water being the most likely means. All cholera discharges should be destroyed by disinfection, and not thrown recklessly into drains or cesspools, where by leakage they may possibly infect drinking water. The contagion of cholera is not so likely to be conveyed by personal intercourse as by residence in an infected district. Sanitary measures have proved to be the only efficacious means of arresting an epidemic; insanitary conditions undoubtedly favour it. In 1885 a representative committee, consisting of Sir William Jenner (President), Sir William Gull, Dr. Burdon-Sanderson, Prof. de Chaumont, Sir Joseph Fayrer, Dr. Timothy Lewis and other experts, was convened by the Secretary of State to consider the report of the English Cholera Commission, made by Drs. Klein and Hemage Gibbes, and the following conclusions were arrived at, which disagree from those announced by Dr. Koch.—1. Comma-shaped organisms are ordinarily present in the dejections of persons suffering from cholera, but not in the blood, the intestinal mucous membrane, or any other tissue. 2. Comma-shaped organisms of closely allied morphological appearances are ordinarily present in different parts of the alimentary canal in health, and are developed to an unusual extent in certain diseases in which there is a copious intestinal secretion, the predominant form in any case depending in great measure on the nature of such secretion. 3. The comma-shaped bacilli ordinarily found in cholera do not induce that disease in the lower animals, and there are no real grounds for assuming that they do so in man. 4. Sanitary measures in their true sense, and sanitary measures alone, are the only trustworthy measures to prevent attacks of the disease, and to restrain its spread and mitigate its severity when it is prevalent. Dr. Koch has lately made further investigations which confirm his belief in the specific nature of the cholera bacillus. Nicati, Rietsch and Van Ermengem, who studied the epidemic at Marseilles, and Babes, Watson-Cheyne and Pfeiffer, who made observations in Paris, strongly support this theory. Nicati and Rietsch have succeeded in infecting dogs and guineapigs by injection of cholera-dejecta into the duodenum, and these experiments have been confirmed by Babes, Flügge and Watson-Cheyne. Dr. Koch has succeeded in infecting guineapigs by cholera bacilli introduced into the stomach by means of a catheter, adopting however the artificial means of neutralising the acid secretion by means of a solution of soda (five cubic centimetres of a 5 per cent. solution) and of arresting the peristaltic action of the intestines (by one cubic centimetre of tincture of opium for every 200 grammes of the body-weight of the animal). In all, eighty-five guineapigs were thus infected, and all died with the same characteristic symptoms and post-mortem appearances. The contents of the intestine of a guineapig were administered to another, which also died of cholera. An International Sanitary Conference was held in Rome (1885), but no unity of action was decided upon. The question of land-quarantine was discussed, and its futility acknowledged by all except the Turkish delegate; land-quarantine was however again resorted to in the subse-

quent outbreaks of cholera in France and Spain. A period of five days' sea-quarantine was decided upon, notwithstanding the opposition of the British and Indian delegates. Professor Hallier's theory, that a parasite which infects the rice plant develops in the course of successive transformations into the cholera fungus, and by throwing off spores becomes the immediate producer of the disease, has been found untenable. Dr. Ferran, of Tortosa, in Spain, claims to have discovered a method of protective inoculation against cholera, and maintains that the results are sufficient to justify the procedure, but he admits that the operation does not confer absolute immunity against the disease. One attack of cholera, indeed, confers no protection against another, nor renders it less fatal; for, as observed by Surgeon-General Murray, in the gaol of Agra the reverse was the case, second attacks proving fatal in 47·5 per cent., whereas first attacks only did so to the extent of 22·7 per cent. of those affected: this has been amply confirmed by others. Dr. Ferran alleges that he has discovered a method of inducing Koch's bacillus to produce spores, and that from these he has obtained an intermediate form, differing in shape and endowed with a different vitality, capable of resisting the action of the gastric juices in which the bacillus of Koch is destroyed. His method of cultivation is so open to error, and his procedures wrapped in so much mystery, that most leading mycologists refuse to accept his conclusions. The statistics of his results are anything but encouraging: many of those inoculated and re-inoculated (for he does not claim to confer immunity against the disease for more than a few months) having died. If the laws of personal health and public hygiene were properly observed there would be no necessity for any risks of inoculation.

Cholmondeley, George Henry Hugh Cholmondeley, 4th Marquis of (creat. 1815); b. 1815; succeeded his grandfather 1884; is joint Hereditary Great Chamberlain of England. The 2nd Earl led the Horse Grenadier Guards of William III. at the battle of the Boyne.

Chopin, François Frédéric. Celebrated writer for the pianoforte, b. near Warsaw 1809. His father was a Frenchman, his mother a Pole. He was a most accomplished pianist, second only to Liszt, and began to compose dance rhythms when quite a lad. At nineteen he set out for England on a musical tour, but stopped at Paris, which he made his home. Liszt introduced him to the great authoress, George Sand, in 1836, with whom he formed a close intimacy. Under the strain of Paris life Chopin's health gave way, and he died of consumption in 1849. He visited England twice. His valse, mazurkas, studies, preludes, nocturnes, ballades, polonaises, surpass anything as yet attempted in their peculiar styles.

Christian IX., King of Denmark, was b. 1818. He is the son of the late Duke William of Schleswig-Holstein-Sonderburg-Glücksburg, and father of the Princess of Wales. He ascended the throne in 1863, and succeeded his brother Ferdinand VII.; before this he was Commander-in-chief of the Danish cavalry. In the beginning of his reign arose the famous dispute about the duchies of Schleswig and Holstein, which he lost after a disastrous war with Austria and Prussia. The assistance he expected from England and France in that dispute failed him, and by the Treaty of Peace of Vienna

(1864) he had to surrender those provinces. King Christian has since devoted his energies to developing the internal resources of Denmark.

Christiania, University of. See **WOMEN'S RIGHTS**.

Christopale, M. See **PANAMA CANAL**.

"Christopher Crayon." See **NOMS DE PLUME**.

Chromo-Lithography, or the art of drawing on and printing from stone, was invented towards the close of the eighteenth century, by Senefelder, at Munich. During the last twenty-five years it has made rapid progress, especially in Germany, where the cheapness of labour, the spread of art education, and the climate, favour the production of high-class work. The bulk of oleographs, Christmas cards, etc., are printed in Germany, or France, or the Netherlands; the remainder being mostly done in England. High-class work is also done in America. The process is, briefly, as follows:—The drawing is first made on stone (cut from quarries in Bavaria, and composed of clay, lime, and siliceous earth) with specially prepared ink; it is then etched by a solution of nitric acid and gum-arabic being poured upon it, which eats away the surface of the stone, leaving the work almost imperceptibly raised, the greasy nature of the ink protecting the drawing from the action of the acid. When placed in the machine the stone is kept damp, and the printing ink from the roller adheres only to the raised part (*i.e.* the drawing), an exact impression of which, even the minutest detail, is produced on the paper. Lithography is largely and increasingly used for ordinary commercial work, such as circulars, plans, maps, etc.; but reproductions of oil paintings, water-colour drawings, etc., are also obtained by this process. In the latter case, the tracing of the original is first made, and a copy transferred to as many stones as there are colours in the picture,—every colour requiring a fresh stone. The drawing on each stone is made to fit in, or register, with the preceding one, and as the paper passes through the machine an additional colour is added every time, one on top of another (each colour being allowed to dry before the next is put on) until the picture is completed. Some chromos or oleographs have as many as twenty-five to thirty paintings or colours. Christmas cards are done in this way; but the original drawing on stone—being small—is multiplied by transfers, to save time and expense in printing. Chalk drawings are also largely reproduced by lithography, the stone being prepared according to the nature of work required. (For full particulars see "Lithography," by Wyman & Sons.)

Chulkhurst. See **BIDDENDEN BREAD-AND-CHEESE**.

Church and Stage Guild, The (founded 1870) is a society of members of the dramatic profession, clergymen, and others, who feel it their duty to endeavour, as far as possible, to get rid of the prejudices widely felt by religious people against the stage, and by theatrical people against the Church. They seek to do this on distinctly Christian principles, believing that as religious prejudice has sheltered itself behind those principles, some attempt at reparation should be made on the part of all who reverence them. It seeks, therefore, to promote religious and social sympathy between members of the Guild and others, and to assert and vindicate the right of religious people to take part in theatrical amusements, whether as

performers or spectators. The Guild is in no sense of the word a mission to the stage. It recognises, indeed, that in many respects the stage, like every other human institution, requires reforming; but it believes that the best way to destroy evil is by developing good, and that the clerical and religious policy of isolation is inimical to this object. The Guild numbers over 300 members, of whom about 100 are clergymen and 100 members of the dramatic profession. A letter by the present Bishop of London, condemning the Guild for supporting the ballet, was written to Rev. S. D. Headlam (1885), and occasioned considerable discussion. The Guild meets once a month for discussion, music, and conversation, and holds occasionally a Sunday evening reunion. There is also an annual *matinée* and picnic; and for the last three years there has, by the kindness of Mr. Augustus Harris, been an afternoon *conversazione* at Drury Lane. A monthly report of the work of the Guild is published in the *Church Reformer*. Secretary, Rev. S. D. Headlam, 26, Alfred Place, Bedford Square, W.C.

Church Army. An organisation of the Salvation Army type, on Church of England lines, founded, in 1883, conjointly by these clergymen:—the Rev. E. H. Hopkins, vicar of Holy Trinity, Richmond; Rev. W. Carlisle, curate of Kensington; and the Rev. F. S. Webster, curate of St. Aldate's, Oxford. The two latter have resigned their curacies, and devote their whole time to the work, the one as secretary, the other as principal, of the home for training evangelists of the working-man class, who are sent out to work under the parochial clergy to preach the Gospel in the streets, visiting among the poor, and to conduct short missions in halls and other places, that by their means the careless may be converted and brought to the Church. Quoting the second annual report, there are 49 captains fully employed, which, with working and training home, cost nearly £3,000 annually. Office, 36, Southampton Street, W.C. Training Home (*pro tem.*) 174, Edgeware Road. Their organ is the *Church Army Gazette*.

Church Association, The, was instituted in 1865 to maintain the principles and doctrines established at the Reformation, and to preserve the purity of Protestant worship in the Church of England; to resist all innovations on the order of the service as prescribed by the joint authority of the Church and State, whether these innovations consist in vestments, ornaments, gestures, or practices borrowed from the Church of Rome; and especially to prevent "the idolatrous adoration of the elements in the Lord's Supper"; to resist all attempts to restore the use of the confessional, and every exercise of that priestly authority which was put down at the Reformation. There is no permanent president, but among the vice-presidents are the Marquis of Abergavenny, the Earl of Brandon, the Earl of Enniskillen, Lord Teignmouth, Sir Thomas Chambers, Q.C., Sir Harry Verney, the Dean of Bristol, the Dean of Ripon, the Rev. Lord Wriothlesley Russell, etc. The terms of subscription for membership are, for laymen 10s. and upwards annually, and for clergymen 5s. and upwards. This Society is the very antithesis of the English Church Union. It has supplied the funds for the various ritual prosecutions, including the lengthened series of suits against Mr. Mackonochie, of St. Alban's, Holborn. Upon the

appointment of Canon King to the see of Lincoln in succession to the late Bishop Wordsworth, the council of the Church Association sent a memorial to the Queen, setting forth the published opinions of Canon King on the doctrine of the Eucharist, masses for the dead, confession and absolution, and praying Her Majesty to inquire into them. It was contended that the opinions held and the doctrines taught by the present Bishop of Lincoln disqualified him from holding the office of a bishop in the Protestant Church of England. The reply received, however, was simply a formal letter from the Home Office stating that the memorial had been laid before the Queen, "and Her Majesty was pleased to give no instructions relating to the same." Whilst, on the one hand, the Church Association deplores the ritualistic development in the Church of England, on the other hand it deprecates evangelical disintegration. During the year for which the last report was issued, twenty-two new branches had been formed, against six in the previous year. The *Church Intelligencer* is the organ of the Association. Offices are at 14, Buckingham Street, Strand.

Church Congress of 1885. This, the twenty-fifth annual meeting, was held at Portsmouth, under the presidency of Dr. Harold Browne, Bishop of Winchester. The Church Congress was established in 1860, and was the outcome of the revival of the meeting of Convocation, which, being prorogued in 1717, had remained silent for 135 years. It is a great council of the Established Church, but differs from Convocation by its members being elective, and including lay as well as clerical representatives. The Congress met with a warm welcome from the Mayor and Corporation, as well as from a deputation of Nonconformists. It was opened by three special sermons, the preachers being the Bishops of Carlisle, Ripon, and Derry. The Congress, as usual, dealt with the current work of the Church, and the various ecclesiastical questions of the day. The principal subjects were **Church Defence**; Revisions of the Old and New Testaments; Work of Women in the Church; Responsibility of the Church as regards the Spiritual and Moral Welfare of our Soldiers and Sailors; the Prayer Book Supplementary Services; and Religion and Art, their influence upon each other. The most successful and enthusiastic meeting throughout the Congress was that of the working men, when from three to four thousand attended.

Church of England. See ESTABLISHED CHURCH.

Church Rates. A means of support to the National Church (now no longer imposed), which may originally have been based on the **kirk-soot** of Theodore, Archbishop of Canterbury, 668-690. Formerly a tax whereby all rateable citizens, according to their assessments, were called upon to contribute to the maintenance of the fabrics and services of the Established Church in their respective parishes. Nonconformists having objected to them, they were abolished in 1868. The churches and services are now provided and maintained solely by Churchmen and Church endowments, whereby all apparent injustice to Nonconformists is entirely removed.

Church, Richard William, D.C.L., Dean of St. Paul's, was b. at Lisbon. Educated at Oxford, where he graduated with much distinction (1836). Fellow of Oriel (1838); rector

of Whatley, Somerset (1853); appointed by Mr. Gladstone to the Deanery of St. Paul's (1871). Dean Church has contributed to *Essays and Reviews*, the *Saturday Review*, the *Guardian*, and other contemporary papers, and has also written important works on **Anselm and Dante** (1850-79), besides sermons, etc. Dean Church is one of the most prominent leaders of the High Church Party.

Churchill, Francis George Spencer, D.C.L., 2nd Baron (creat. 1815; b. 1802; succeeded his father (1845). The 1st peer was youngest son of the 3rd Duke of Marlborough.

Churchill, Rt. Hon. Lord Randolph, P.C., second son of the 6th Duke of Marlborough and Lady Frances, daughter of the Marquis of Londonderry, was b. 1849. Educated at Merton College, Oxford, Mar. (1874) Jennie, dau. of Leonard Jerome, of New York. Entered Parliament in the Conservative interest as member for Woodstock (1874), which he represented till its disfranchisement (1885), when he was elected for South Paddington. Has held office as Secretary of State for India in the late Salisbury administration (1885-86). Lord Randolph Churchill has with extraordinary rapidity made his mark in the House of Commons, coming first into prominence as the leader of the Fourth Party (*q.v.*), and by the vigour of his oratory and boldness of attack was gradually acknowledged the most active member of the Opposition during the Gladstone government, and also took a leading part in the attacks made against the foreign and domestic policy of the Liberals. He made a tour in India (1884), the information he gained being utilised with advantage in his conduct of the India Office. Lord Randolph gained much *éclat* by his spirited attack on the stronghold of Radicalism in opposing Mr. John Bright at Birmingham at the late general election. His recent visit (Feb. 23rd, 1886) to the loyalists of Belfast, where he met with an enthusiastic reception, has been made the subject of parliamentary interpellation by Mr. Sexton, M.P.

Churston, John Yarde Buller, 2nd Baron (creat. 1858; b. 1846. Formerly Capt. Scots Fusilier Guards.

Cider Truck System. The Truck Act, which rendered it illegal to pay any portion of a working-man's wages in other than the current coin of the realm, was passed in 1831, at which time, it being thought that cider was a necessity to farm labourers, they were specially exempted. It is now, therefore, largely the custom to give, in lieu of wages, an amount of cider often equal to one-eighth of their weekly income (from 12s. to 14s.). Competent and practical judges in the districts concerned have maintained for half a century that the system is productive of much physical and moral evil. Professor Voelcker showed in 1857 that "no labourer would take any part of his wages in cider if he knew how to protect his own interests," a hogshead only containing as much flesh-forming and meat-giving food as 7½ lb. of bread. One authority says that the system, which cuts down by about 20 per cent. the amount, already small, available for the labourer's family, engenders disease and a habit of drinking, and leads to premature disablement and old age. This is confirmed by a late Dean of Hereford. The statistics of local friendly societies show that when the cider crop has failed, there have been appreciably fewer claims upon the sick funds. Mr. Hansard,

a surgeon, found that in such years there was a remarkable diminution of accidents on the farms and acute attacks in the fields. The system has been so worked, however, and the ignorance of the bulk of the labourers concerned is so dense, that in many cases they seem to have no wish for money instead of cider, if it were offered them; though at the same time no real difficulty has been encountered in getting the men to work without cider when a fair equivalent is given them. Employers find that with a cash allowance and no cider very much more satisfactory work is obtained from their men; who, it is estimated, could, with the money thus gained, easily be enjoying a good freehold cottage and two or three acres of land by the time they are fifty, instead of being dependent on the parish, or inmates of the workhouse, as is the case in many instances. By growing the best qualities of cooking and eating apples more profit is made than by making cider. Several west-country farmers have used the fruit advantageously with chopped hay and straw for feeding cattle, in some cases utilising in this way inferior hay; and jam and jelly-making has been carried on with considerable success. A brief bill, which simply seeks to include under the operations of the Truck Act the words "servants in husbandry," exempted in Clause 20, has been drafted by the National Temperance Federation. ("Cider Truck System," W. S. Clark, Street, Somerset; "Cider Drinking in Rural Districts," F. Sessions, Gloucester.)

Cilia (from *cilia* = eyelashes). Microscopic threads, constantly and regularly waving to and fro, sweeping along in a definite direction any fluid in contact with them. Their structure, position, movement, and function, will be considered. (1) **Structure.** Extensions of cells; apparently in most cases protoplasmic and homogeneous; diameter varying from $\frac{1}{1000}$ to $\frac{1}{200}$ of an inch; in the human windpipe the former diameter, in the gills of the whelk the latter is obtained. The cells to whose free surfaces the cilia are attached are of various shapes in the different animals and plants that have cilia: in man they are columnar, and the tissue formed by them is ciliated, columnar epithelium. (2) **Position.** In man cilia occur lining the following cavities: (a) respiratory tract from the top of the windpipe to the finest ramifications, but not the terminations of the bronchial tubes; (b) the minute canal running through the centre of the spinal cord and part of the cavities within the brain; (c) nose cavities, except at their summit; (d) middle ear, and the Eustachian tube connecting this with the throat; (e) parts of the organs of reproduction in both sexes. In animals lower than man, cilia are found to be present in one or more members of most classes. Some of the best examples are in Aves (respiratory organs), Reptilia and Amphibia (mouth), Pisces (nose), Mollusca generally (gills), Porifera (in the dilatations of the internal canals), Infusoria (on the surface of the body). Cilia are also met with in low members of the vegetable kingdom. Many Algae (*q.v.*), *e.g.*, set free zoospores (*söon*=animal), that, provided with cilia, move about for a time, then settle down, lose the cilia, and develop into a plant like that whence they came. (3) **Movement.** A rapid bending and slower recovery is the commonest. The bending is due to the contraction of the cilium; the recovery to elasticity. The greater

velocity of the bending as compared with the less velocity of the recovery results in the force of the action being in the direction of the bending. The movements are, in the frog, twelve of each per second. They are not visible until they are about eight per second. The appearance of a number of cilia moving is as that of a field of corn when moved by the wind. Other kinds of movement seen among lower forms of animals are the undulating (whiplike), oscillating (pendulum-like), funnel-shaped (a revolving cone). The movements are most affected by temperature changes and chemical reagents. Moderate rise of temperature quickens, about 40° C. stops, and low temperatures retard. Very weak alkalies help, acids injure. Chloroform diminishes, suspends or destroys the motion, according to the quantity used. (4) **Function.** Generally to change the fluid in contact with the ciliated surface—mucus in our lungs, water laden with air in the gills of the mussel. In the Infusoria and in the low plants the movements of the cilia cause motion of the whole animal or organ to which they are attached.

Cinchona. The name of a genus of plants belonging to the order cinchonaceæ, of which the coffee and the madder plant are also members. The bark of certain species of this genus is valuable as containing quinine and substances allied to quinine that are of use in the treatment of intermittent fevers and other diseases. The original habitat of the cinchona trees was the valleys of the Andes between 19° S. and 10° N. latitude. Vertical range between 4,000 and 12,000 feet. Now cinchona trees are cultivated in British India, Ceylon, Jamaica. Attempts have also been made to introduce the growth of cinchona in Trinidad, Mauritius, St. Helena. The history of cinchona is briefly this. The natives of its original district knew little of its value, and had even a prejudice against it. In 1600 a Jesuit at Loxa, capital of the district of the same name, 240 miles from Quito, was cured of a fever by use of the bark of cinchona. Ever since, the name *Jesuit's bark* has been as usual as that of *Peruvian bark*. In 1638 the wife of the Viceroy of Spain, the Countess of Chincon, enjoyed the same fate. From her title, the genus, after the dropping of an h, has its name. In 1640 the bark was brought to Spain, and in 1670 taken to Rome. In each case the Jesuits were the agents. From Rome its use spread through Europe, entering as a subject of discussion into the Roman Catholic and Protestant controversies. Up to 1776 only *Loxa bark* (*v.i.*), with some little red bark, was used. In 1777, as this was growing scarce in Peru, a Spanish expedition of inquiry was sent out. By this seven species of the *grey bark* (*v.i.*) were discovered, and about the same time (1776) the *yellow bark* was found. Not until 1820 was *quinine*, the chief alkaloid, isolated; nor until 1857 was the plant yielding quinine satisfactorily determined by botanists. As the native supplies of cinchona bark were becoming overdrawn, in 1852 the Indian Government suggested the attempt to acclimatise the trees elsewhere. In 1859 *Clements Markham* was sent out to South America. The idea was to bring over to India and elsewhere all the cinchona species yielding useful bark. In India the red bark took the lead; later Loxa bark became of moment. These two are also the chief ones in Jamaica. In Ceylon the cinchona culture is now the staple business. About 1864-5

a Mr. Ledger sent from South America seeds of a species of cinchona to his brother in England. The Indian Government would not buy, but the Dutch would and did. In Java they soon had 20,000 trees of *Cinchona Ledgeriana* growing, and by careful artificial selection they have produced thence one of the most successful of barks. One-half of Ledger's seeds went to the Dutch, one-half to a private Anglo-Indian, Mr. Money. From him, and through the non-greed of the Dutch, the Indian Government has obtained seeds, and thence trees, of *Cinchona Ledgeriana*. Jamaica also has this plant now. Ledger received in all £24. Only 10 per cent. of all the quinine made, is made in England. London is the best market, and Paris the next best, for cinchona in all its forms and derivatives. The report of Dr. King (Bengal, 1882-3) gives: trees, 4,711,168; lb. of dry bark, 396,980; of these, red bark, 372,610; yellow and brown, 22,120; hybrid, 2,250; lb. of ordinary febrifuge, 10,363; of crystalline, 300; dividend to capitalists, 6½ per cent. The species of cinchona are 30; but not all are valuable, nor are those that are of equal value. The important species are *Cinchona condaminea* (officialis of Linneus), the Loxa, or Crown (i.e. Royal) bark; *C. succirubra*, the red bark, the official of the German pharmacopœia, the cheapest and the richest in secondary alkaloids; *C. calisaya*, yellow bark, the most in favour and the most difficult of growth; *C. micrantha* and *C. nitida*, grey bark. The alkaloids present in cinchona bark are quinine ($C_{20}H_{24}N_2O_2$), the primary one, whose relative importance is certainly exaggerated; quinidine (same formula), cinchonine and cinchonidine (each $C_{20}H_{24}N_2O$), and Quina bark (Indian). The Indian-grown bark has more alkaloids than the South American. Quinine will probably be made artificially ere long, and possibly from coal-tar products. [Works of reference on quinology: reports, such as King's (U.S.), Morris' (Jamaica), T. C. Owen's "Cinchona Planter's Manual," published at Colombo (Ceylon), King's "Manual of Cinchona Cultivation"; Van Gorkom's "Handbook of Cinchona Cultivation," trans. by B. D. Jackson (Van Gorkom is the director of the Dutch cinchona plantations in Java); Clements R. Markham's "Peruvian Bark."]

Cinque Ports, The, a group of seven ports (originally five, whence the name) situated on the south coast of England (in Sussex and Kent). **Hastings, Romney, Hythe, Dover and Sandwich** were the original ports; **Winchelsea and Rye** being added afterwards. They had their own officers ("barons") and wardens, possessed criminal and civil jurisdiction within their own districts, were exempted from taxes and tolls, were empowered to make their own bye-laws, and to regulate certain fisheries, etc., being required in return to annually furnish the Crown with fifty-seven ships for fifteen days. Up to the reign of Henry VII., they were thus an important factor in the navy, and their ships distinguished themselves against the **Spanish Armada** (1588). Their charters were surrendered to the Crown in 1885, and their privileges abolished by the Reform Act of 1832 and the Corporations Act of 1835.

Circumstantial Evidence. A fact is said to be proved by means of circumstantial evidence when, instead of being attested directly by one's own senses, or by those of other persons, it is inferred from some other fact or facts so directly attested. Thus, if A

swears that he saw B shoot C, this is direct evidence of B's guilt. But if A swears that, passing by a certain house, he heard three shots in rapid succession, and then saw B rush out revolver in hand, and upon going in found C lying dead in a pool of blood, this is circumstantial evidence that B murdered C. It is clear from such an example as this that the value of circumstantial evidence varies indefinitely. A's evidence in the one case is just as trustworthy as in the other. In both cases an inference has to be drawn from A's statement, for A's senses may possibly have been deceived in either case; and in both we tacitly and unconsciously make the inference from his statement that he saw an occurrence to the conclusion that the occurrence took place. But the inference made in acting upon circumstantial evidence, although consisting of more steps, may be safer than the inference made in acting upon direct evidence. Suppose that the witness who deposed to having seen B shoot C is a man apt to mistake one face for another, or was drunk, or malicious, or some distance off, or in a bad light for seeing objects precisely. Suppose that the witness who deposed to having heard and seen the circumstances whence it is inferred that B shot C is a man of exact perceptions, sober, honest, and in a position favourable to seeing and hearing correctly. Then the circumstances in the one case are far better attested than in the other; and a strong inference from well-attested facts may be a safer assurance than an untrustworthy statement. Thus circumstantial evidence may be stronger than common direct evidence, and may be almost as strong as the strongest direct evidence. But it rarely is quite satisfactory, for it is only in abstract science that we can find quite trustworthy inferences. The inferences which have to be made in business and the administration of justice seldom afford more than a strong probability.

Cirencester Royal Agricultural College. See AGRICULTURAL COLLEGES.

Cirro-Cumulus Clouds. See METEOROLOGY.

Cirro-Stratus Clouds. See METEOROLOGY.

Cirrus Clouds. See METEOROLOGY.

Cis-Molopo. See BECHUANALAND.

City and Suburban. See RACING.

City Companies. See CITY GUILDS.

City Charities. The charities of the City of London, excluding Christ's Hospital and the medical hospitals connected with the Corporation may be divided into **two sections**: firstly, the parochial charities; and secondly, the charities under the trust of the guilds or companies of the City of London. All the money left to the City parishes must at present be spent within those parishes; but as houses were pulled down to make room for houses and warehouses, in many cases none of the class of persons remain for whose benefit the charities were intended. The **London School Board** first commenced an inquiry upon the subject; and in 1878 the Government appointed a **Royal Commission**, which was presided over by the Duke of Northumberland, to inquire into the City Parochial Charities. These charities comprise 1,330 trusts in 106 parishes; and the income at the present time is estimated at about £110,000 or £115,000 a year. In 1879 the estimate by the London School Board was £104,000. The estimate of the Royal Commission for the year 1876 was £101,000; in 1870 the income was £85,000; and in 1865, £67,000.

objects for which the trust income was to include payments to clergymen for pre-anniversary sermons in commemoration of the founders, masses for the repose of the dead, commemorations of thankfulness for the nation being saved from the Spanish Armada, and for the failure of the Gunpowder Plot, and for the accession of Queen Elizabeth. Lands have been left for such obsolete purposes as the purchase of faggots for the burning of heretics. About £19,000 a year has been left for educational purposes, and considerably over £2,000 a year for apprentices. But the most marvellous revelation of the School Board inquiry was that some of the trustees of these charities actually paid out of the income of the trusts no less than £10,000 a year towards the poor rates of the City. The scheme of the Royal Commission was the City of London Parochial Charities Act, 1883, under which Sir Francis Sandford and other Commissioners were appointed to make an investigation of the property and effects belonging to the several trusts, and to provide a scheme for the future application and management of the charity property and endowments. The purpose of drawing up this scheme. Commissioners were allowed till the end of the year 1887, with the provision that their powers, if necessary, should be extended for two years longer. When the scheme is prepared a new body will be appointed to administer. After making provision for the various interests, the Commissioners are to classify the property scheduled as ecclesiastical property to be used for the maintenance of the fabric and services of the Church, or such other ecclesiastical purposes as may seem beneficial to the inhabitants of the parishes. The other charities, a great proportion of which have become obsolete, are to be amalgamated, and the funds to be used for the promotion of the education of the poorer inhabitants of the parishes, by means of exhibitions, or technical instruction, or by secondary education, art education, evening lectures, etc.; the establishment and maintenance of libraries for the poorer inhabitants; the preserving, providing and maintaining of open spaces and recreation grounds or drill grounds; the promotion of provident institutions, and working men's and women's institutes; and generally for the physical, moral, and social improvements of the poorer inhabitants of the City. The trusts assessed by the existing guilds or City companies number 1028. The total income amounts to about £185,829, which is nearly double the amount scheduled in the return of the House of Commons made in 1868, on the motion of Lord Robert Montagu—viz., £99,027. The appropriation is as follows:—For sermons, lectures, etc., £3,083 4s. 10d.; for church expenses, £645 11s.; for candles (used during lectures, etc.), £9; for church impropriations, £202 11s. 5d.; for coals, £311 5s. 10d.; for clothing, £1870 1s. 10d.; for medical aid, a large share of which is in connection with convalescent hospitals (the whole of the Debtor Prison charities having been, under a Chancery decree, appropriated to that object), £4089 0s. 7d.; for food (including bread, cheese, fish, potatoes, etc.), £524 13s. 6d.; for education (including exhibitions), £65,130 13s. 6d.; for bread and education (mixed in a manner that prevents the proportion for each being understood), £118 4s.; for Bibles, £3; for appren-

ticeship, £2908 16s. 10d.; for marriage portions, £2 6s. 8d.; for cleaning and repairing tombs, £9 6s.; to provide wool and flax to afford means of employment, £3; for the repair of highways, £129 7s.; to be used as loans, free of interest, £87 10s.; for alms (money gifts), £105,792 1s. 1d.; applied to poor rates, £6; various objects, £1013 3s. 10d. These charities are not included in the provisions of the Parochial Charities Act, but will be dealt with if the recommendations of the reports of the City Guild Commission are carried out.—In connection with the City charities must also be mentioned *Christ's Hospital*, which was founded in 1547 for the reception of fatherless, motherless and destitute children. In 1552, in the reign of Edward VI., 300 children were received. At present the Hospital consists of two institutions—one at Hertford, being a preparatory school for boys before they are sent to London; and also a school, not preparatory, for girls. The boys after leaving the preparatory school are transferred to London. In March 1885 a new scheme was issued by the Charity Commission. It is proposed to sell the existing site, which will realise £600,000. A new governing body, 43 in number, giving two representatives apiece to Oxford, Cambridge, and London Univs., to be called the Governors and Council of Almoners, will be instituted. The schools of the foundation are to be termed hospital schools and day schools. The hospital schools will be boarding schools for 700 boys and 500 girls, and a preparatory school for 120 boys. The hospital schools must be maintained within a convenient distance from the City of London. The day school for boys is to be called the Science School (for 600 scholars), and the school for girls the Girls' Day School (the latter for 400 scholars), and these are to be maintained at a distance of not more than three miles measured in a straight line from the Royal Exchange. One hundred and seven places in the boys' hospital school, and seventy in the girls' school, are to be allotted for competition among children attending any of the public elementary schools of the metropolis. In the day schools, 300 free places in the Science School and 200 free places in the Girls' Day School will be allotted to boys and girls attending public elementary schools in the metropolis. A yearly sum of £1,000 will be applied in maintaining exhibitions of the value of £40 per annum for boys attending the Science School, and £500 for exhibitions of a similar value for girls attending the Girls' Day School. This scheme is still under consideration.

City Guilds, The. There have been 109 companies founded, but the latest return only gives a total of 75, as follows:—The Worshipful Companies of Apothecaries, Armourers, Bakers, Barbers, Basketmakers, Blacksmiths, Bowyers, Brewers, Broderers, Butchers, Carmen, Carpenters, Clockmakers, Clothworkers, Coachmakers, Cooks, Coopers, Cordwainers, Curriers, Cutlers, Distillers, Drapers, Dyers, Fanmakers, Farriers, Feltmakers, Fishmongers, Fletcherers, Founders, Framework Knitters, Fruiterers, Girdlers, Glass-sellers, Glaziers, Glovers, Gold and Silver Wyre Drawers, Goldsmiths, Grocers, Gunmakers, Haberdashers, Horners, Innholders, Ironmongers, Joiners, Leather-sellers, Loriners, Makers of Playing Cards, Masons, Mercers, Merchant Taylors, Musicians, Needle-makers, Painters, Patten-makers, Pewterers, Plasterers, Plumbers, Poulterers, Saddlers,

Salter, Scriveners, Shipwrights, Skinners, Spectacle-makers, Stationers, Tallow-chandlers, Tyllers and Bricklayers, Tinplate-workers, Turners, Upholders, Vintners, Wax-chandlers, Weavers, Wheelwrights, and Woolmen. The twelve principal companies are those of the Mercers, Grocers, Drapers, Fishmongers, Goldsmiths, Skinners, Merchant Taylors, Haberdashers, Salters, Ironmongers, Vintners, and Clothworkers; but two of the largest liveryies are those of the Loriners and Spectacle-makers, both of which, however, like several of the minor companies, have scarcely any income except such as arises from the fees and fines paid by the members. In 1880 it was estimated that the trust and corporate income of the livery companies of London was between £750,000 and £800,000, and the capital value of their property £15,000,000. The value of their plate and furniture was returned at about £270,000. There is great disparity in the amount of the trust income of the various companies. The Grocers, for instance, have a trust income of only £500, out of a total income of £38,000. The total income of the Fishmongers is upwards of £50,000, of which the trust income is but £3,800. On the other hand, the trust income of the two wealthiest companies is, in the case of the Mercers £35,000 out of £83,000, and of the Drapers £28,000 out of £79,000. On the whole it is estimated that the trust income is about £200,000 a year, and the corporate income from £550,000 to £600,000. Several of the companies possess a considerable amount of real property in the county of Londonderry. The rental of the real property is above £600,000, and there is a further source of income exceeding £100,000 a year from investments. The contributions of existing members are from £15,000 to £20,000 a year. Of the £200,000 which forms the charitable or trust income, about £75,000 a year is expended on the support of almshouses and the relief of poor members, another £75,000 on education, and about £50,000 on charitable objects of a general character. The portion of the corporate income which is devoted to public or benevolent objects is estimated at £150,000 a year; so that altogether about half the income of the companies is allocated either under the terms of benefactions or voluntarily to public or benevolent objects. Many of the charities of the companies are for the benefit of the inhabitants of provincial towns and villages where they possess land. The cost of the hospitality annually given by the companies is estimated at £100,000. **Technical education** (*q.v.*) has within the last few years been taken up by the Guilds. The Clothworkers' Company has promoted the establishment of Yorkshire College at Leeds, where instruction is given in the manufacture of woollen goods, and similar institutions at Bradford, Huddersfield, and other places. **The City and Guilds of London Institute**, for the advancement of technical education, has also been formed. There is a technical college at Finsbury and a central institution at South Kensington. A building fund of upwards of £100,000 has been contributed, the annual subscriptions promised amounting to about £25,000 a year. On July 20th, 1880, a **Royal Commission** was appointed to inquire into the circumstances and dates of the foundation of the City Livery Companies, the objects for which they were founded, and how far those objects were now being carried out. The members of the Commission were

the Earl of Derby, the Duke of Bedford, Viscount Sherbrooke, Lord Coleridge, Sir R. A. Cross, Sir N. M. de Rothschild (now Lord Rothschild), Sir Sydney H. Waterlow, Alderman Cotton, Mr. A. Pell, Mr. Walter H. James, Mr. J. F. Firth, and Mr. Thomas Burt. On May 28th, 1884, the Commission issued its report, in which it recommended that the companies should be placed by act of parliament under such restrictions as regards the alienation of their real and personal estate as would remove all danger of the loss of any portion of their property; that the accounts of the companies should be open to public inspection; that no future admission to the livery of a company should confer the parliamentary franchise; that appointment of a commission which should undertake the allocation of a portion of the corporate incomes of the companies to objects of acknowledged public utility, the better application of the trust incomes, and should it prove practicable, the reorganisation of the constitution of the companies. The commission defined objects of public utility as follows: 1. **Schoolastic and scientific subjects**—i.e. elementary education, secondary education, classical education, technical education, scientific research. 2. **General public purposes**—e.g. hospitals, picture galleries, museums, public libraries, public baths, parks and open spaces. 3. **The improvement of workmen's dwellings**, and where the companies represent trades, subsidies to the benefit societies of such trades. This report was signed by the Earl of Derby, the Duke of Bedford, Viscount Sherbrooke, Lord Coleridge, Sir Sydney H. Waterlow, Mr. A. Pell, Mr. W. H. James, Mr. J. F. F. Firth, and Mr. T. Burt. A dissenting report was signed by Sir R. A. Cross, Sir N. M. de Rothschild, and Alderman Cotton. They considered that the recommendation with respect to restraint of alienation was invidious and unnecessary, and they did not agree with the appointment of the proposed commission, pointing out that a reorganisation of the companies was impracticable, and that the objects of public utility mentioned were more likely to be promoted by the spontaneous action of the companies than by schemes forced upon them by a commission. Alderman Cotton also signed a separate protest. The carrying of the recommendations of the majority of the Royal Commission into legislative effect was one of the points in the programme of Sir Charles Dilke and the great majority of the Liberal candidates in the metropolis at the recent general election.

"Civil Engineers' and Architects' Journal." See SPENCER, HERBERT.

Civil Law. The word "civil" in this connection is highly ambiguous. Civil law is sometimes opposed to criminal law, and sometimes to martial law. But it is commonly used to describe the Roman law and the various modern systems of law based thereupon, as contrasted with the English common law.

Civil List. The, is the annual grant of parliament to the monarch, the yearly sum now being £385,000, the whole of which is devoted to Her Majesty's household and personal expenses, with the exception of £1,200, which may be granted in pensions (*v.i.*). The grant originated in the reign of William and Mary and covered the payment of civil office and pensions, when the amount was £700,000 (£400,000 being derived from the Crown revenue).

mes and £300,000 from excise duties). Since the Court of Exchequer decided that, if he chose, the king could alienate his whole revenue. The List, after having reached £800,000, and in 1777 (George II.) £900,000, was, on the accession of William IV., cleared of all salaries, &c., upon it, and placed at £510,000, including a pension list of £75,000. The purposes to which the pensions were applied were, in 1834, limited to the deserving and needy; and in 1838, the year of Queen Victoria's coronation, it was provided that, in place of a grant of £75,000 for civil list pensions, "Her Majesty should be empowered to grant in every year new pensions on the civil list to the amount of £1,200, all such pensions to be in strict conformity with the House of Commons' resolutions of 18th February, 1834." (1 Vict., c. 2).

Civil List Pensions. Grants 1880-85. See APPENDIX.

Civil Service. One of the oldest institutions of the country, and probably dates from the earliest monarchical times. It is only within perhaps the last hundred years that the English Civil Service has assumed its present vast proportions. The Civil Service comprises all persons who serve the Queen in a civil capacity, as opposed to those employed in the military and naval services. The total number of persons so employed cannot be far short of half a million. The chief department of the Civil Service is the **Treasury**, which exercises a control over all other departments, and from whom alone authority is obtained for all expenditure. Perhaps next in importance is the **Exchequer and Audit Department**, which is charged with the audit of the accounts of all other departments, and is required to see that the expenditure of each is in accordance with the authorities received from the Treasury. The **Foreign Office** (including the diplomatic service), the **India Office** and the **Colonial Office**, together with the **Home Office**, probably rank next amongst the numerous departments of the Home Civil Service. The three revenue departments—namely, the **Post Office**, **Inland Revenue**, and **Customs**—are of course important branches of the service; there are also, amongst what is known as the spending departments, the **War Office**, **Admiralty**, **Board of Trade**, **Office of Works**, **Education Office**, **Privy Council Office**, the **Stationery Office**, and many other smaller offices. The total cost of the Civil Service for the year ended March 31st, 1885, was £28,258,492, of which sum £10,249,146 was absorbed in the costs of collecting the revenue in the three departments named, thus leaving £18,009,346 as the total cost of civil services, which may be apportioned as follows:—Public works and buildings £1,911,326; salaries and expenses of civil departments £2,441,555; law and justice, £6,524,462; education, science and art, £5,164,794; Foreign and Colonial Services, £696,822; non-effective and charitable, £1,198,484; and miscellaneous, £71,903. The revenue collected during the year ended March 31st, 1885, amounted to £88,063,055. Most of the clerkships in the Civil Service are now thrown open to public competition, and the various offices are grouped into two grades. The recommendation of the **Playfair Commission** which sat in 1874 to inquire into the Civil Service—namely, that the service should be divided into a **Higher** and a **Lower Division**, with a specified scale of salaries irrespective of office

for each division—has never been fully carried out. Most of the better-class offices are grouped under Grade I., and the remainder under what was formerly known as Grade II.; in these latter, however, most of the vacancies are being filled up by the appointment of Lower Division clerks under the **Playfair scheme**. The **scale of salaries** for these clerks is uniformly throughout the service £80 by £15 triennially to £200; while duty-pay not exceeding £100 may be paid to clerks of the Lower Division who are performing superior duties. In those offices where the hours of attendance are seven instead of six the salaries of the Lower Division clerks are increased by about one-sixth. Although it was one of the objects of the **Playfair scheme** to abolish a numerous class of civil servants known as **writers**, who receive tenpence an hour, and whose appointments are of a purely temporary character, there still exists a considerable body of these men in the Civil Service. There is of course a considerable difference in the **examinations** for the two grades of the Service; and that for the higher grade is what is popularly termed a "stiff" one. Very good prizes are offered to the successful candidates in this examination, which therefore attracts candidates from amongst university men. The Lower Division examination is of a simpler character, and as the prizes offered are not so great, a different class of men is attracted. Full particulars of all examinations for the Civil Services, and of the situations to be competed for, can always be obtained on application to the **Civil Service Commission**, at Cannon Row, S.W.

Civil Service Examinations. See CIVIL SERVICE.

Civil Service Supply Association. The, was started in 1866, with the object of carrying on the trade of general dealers, so as to secure to members of the Civil Service and the friends of members of the Society, the supply of articles of all kinds, both for domestic consumption and general use, at the lowest possible price, on the principle of dealing for ready-money. Co-operation on the broadest scale of retail shopkeeping is brought into play. The **organisation** consists of three classes of purchasers: namely, the shareholders from whom the committee of management is chosen; the ordinary members, who, being connected with the Civil Service, pay two shillings and sixpence a year; and outsiders, or mere supporters of the concern (who, however, must be friends of members or shareholders), who pay the sum of five shillings annually. All have the same advantages in the purchase of goods, but members of the Civil Service have the privilege of having goods above a certain amount delivered carriage free. The beginnings of the Association were of the smallest description, and from less to more it has assumed truly gigantic proportions, and now takes rank as one of the wonders of the Metropolis. It may safely be stated that there is no saleable commodity which cannot now be obtained at the Civil Service Supply Association (even seats at a theatre can be booked at the Stores). A **price list** is issued every quarter, in which are duly chronicled all the goods, etc., sold by the Association. The list is no bad criterion of the success of the Institution. When it was first issued, the contents covered no more than a small single sheet; now, however, it is a thick book of some five hundred pages. It is

not only a record of all goods sold at the stores, but also contains the names and addresses of the various firms which have entered into arrangements with the Society for selling their goods to members at a discount varying from 5 to 25 per cent.; and besides, a large portion of the volume is devoted to advertisements, which no doubt form a considerable source of income to the Association. The extent of the business at these Stores may be judged by the fact that during the half-year ended June 30th, 1885, goods were bought to the amount of £730,213 7s. 1d., and sold to the amount of £840,979 os. 5d. The stock in hand at the close of the half-year was valued at £315,423 3s. 8d. The total gross income was £110,298 7s. 1d., and the working expenses amounted to £86,088 7s. 4d., of which sum salaries and allowances alone absorbed more than one-half—namely, £46,540. The number of persons employed by the Association numbers considerably over six hundred. The headquarters of the Society consist of huge and handsome premises in Queen Victoria Street, London, E.C. The Association also possesses commodious premises in Bedford Street, Covent Garden, for the convenience of West End customers, as well as large premises at the back of Exeter Hall which are used for storage purposes, and for the sale of various new articles. The tailoring department is also carried on there.

Glanbrassil, Baron. See RODEN.

Glanccarty, Richard Somerset Le Poer Trench, 4th Earl of (creat. 1803); Viscount Glancarty (1823), Baron Trench (1815), by which last two titles he sits in the House of Lords; b. 1834; succeeded his father 1872.

Glaney, Mr. John Joseph, M.P., was b. 1847. Educated at the College of the Immaculate Conception, Athlone, and Queen's Coll., Galway. Member of the staff of the *Nation*. Returned as a Nationalist for North Dublin County (1885).

Glanricarde, Hubert Geo. De Burgh Canning, 2nd Marquis (creat. 1825); Baron Somerhill (1826), by which title he sits in the House of Lords. M.P. for Galway (1867-71); b. 1832; succeeded his father 1874.

Glanwilliam, Richard James Meade, 4th Earl of (creat. 1776); Baron Clanwilliam (1828), by which title he sits in the House of Lords; b. 1832; succeeded his father 1879. Entered the Royal Navy (1845); was severely wounded at the assault on Canton (1857); was a naval aide-de-camp to the Queen (1872-76); and a Lord of the Admiralty (Feb. 1874 to May 1880); has been commander-in-chief North American and West Indian station since 1885.

Clarendon, Edward Hyde Villiers, 5th Earl of (creat. 1776); b. 1846; succeeded his father in 1870; was M.P. for Brecknock (April 1869 to June 1870).

"Clark" Burner, The. See ILLUMINANTS.

Clark, Mr. Gavin Brown, M.D., M.P., was b. at Kilmarnock 1846. He studied for the medical profession at the Universities of Glasgow and Edinburgh, and at King's Coll., London, and was a practitioner for some years in London. Returned in the Liberal interest as member for Caithness-shire (1885).

Clark, Mr. Latimer. See PNEUMATIC TUBES.

Clarke, Dr. See SPELLING REFORM.

Clarke, Mr. Edward, Q.C., M.P., was b. 1841. Educated at the City Commercial Schools, Lombard Street, and Crosby Hall. Gained the Society of Arts prize for English Literature

(1856), History (1857). Called to the bar at Lincoln's Inn (1864). Created Q.C. (1880). Elected a bencher of his Inn (1882). Returned as Conservative member for Southwark (Feb. 1880); Plymouth (1880-85); re-elected 1885.

Classical and Biblical Dictionaries. See SMITH, DR. WILLIAM.

Clayton-Bulwer Treaty (1850). So called from the names of the two plenipotentiaries, Mr. J. M. Clayton, U.S., and Sir Henry L. Bulwer, respecting Great Britain. The treaty provided certain mutual guarantees for the protection and control over the proposed Nicaragua Ship Canal (see ENGINEERING).

Cleavage. See MINERALOGY.

Cleghorn, Dr. H. See FORESTRY.

Clements, Baron. See LEITRIM.

Clergyman, Beneficed. The term benefice, in its widest acceptance, includes every ecclesiastical preferment whatsoever. In its ordinary acceptance it denotes the office or living enjoyed by the clergyman of a parish, whether rector or vicar; the office or living more fully described as a benefice with the cure of souls. A beneficed clergyman is a clergyman who has such a benefice.

Clergy, Deceased, 1885. See APPENDIX.

Clerkenwell Fire, The. See FIRE AND LIFE INSURANCE.

Clerks, Civil Service. See CIVIL SERVICE.

Clermont, Thomas Fortescue, 1st Baron (creat. 1866); b. 1815. Was M.P. for Louth (July 1840 to July 1841).

Cleveland, Harry George Powlett, 4th Duke of (creat. 1833); b. 1803; succeeded his bro. in 1864; K.G. (1865). Was M.P. for Durham South (1841 to May 1859), when he was returned for Hastings. This family is descended from Sir Henry Vane, knighted at Poitiers (1536); numbers amongst its ancestry the celebrated patriot Sir Harry Vane, distinguished in the civil wars, and beheaded on Tower Hill.

Cleveland, President Stephen Grover, b. 1837. After an early life of industry he became a prosperous lawyer. Elected Mayor of Buffalo (1881); Governor of New York State (1882); President U. S. A. (March 1885).

Clifden, Henry George Agar-Ellis, 4th Visct. (creat. 1781); Baron Clifden (1776) (Irel.); Baron Mendip (1794), Baron Dover (1831), by which last two titles he sits in the House of Lords; b. 1863; succeeded his father 1866.

Clifden, Baron. See DARNLEY.

Clifford of Chudleigh, Lewis Henry Hugh Clifford, 9th Baron (creat. 1672); b. 1851; succeeded his father 1880. B.A. Lond. Univ. (1872); a Count of the Holy Roman Empire. The first peer was a member of the famous Capal Ministry of Charles II.

Climate. See FORESTRY AND METEOROLOGY.

Clmatology. See METEOROLOGY.

Clinton, Charles Henry Rolle Hepburn-Stuart-Forbes-Trefusis, 20th Baron (creat. 1299); b. 1834; succeeded his father 1866. Was Under-Secretary of State for India (July 1867 to December 1868); M.P. for North Devon (April 1857 till 1866).

Clockmakers, The Worshipful Company of. See CITY GUILDS, The.

Clonbrock, Robert Dillon, 3rd Baron (creat. 1790); b. 1807; succeeded to the title 1826.

Cloncurry, Valentine Lawless, 4th Baron (creat. 1789); b. 1840; succeeded his father 1869.

Clonmell, John Henry Reginald Scott, 4th Earl of (creat. 1793); b. 1839; succeeded his

ther 1866; elected a representative peer of Ireland (1874).

Close Time. See GAME LAWS.

"Clothes Ministry." See "OUTCAST LONDON."

Clothworkers, The Worshipful Company of. See CITY GUILDS, THE.

Cloud Observation. See METEOROLOGY.

Clubs and Club Houses, Principal. See APPENDIX.

Clyde, The. See SHIPPING AND SHIP-BUILDING.

Coachmakers, The Worshipful Company of. See CITY GUILDS, THE.

Coal. The chief varieties of coal are anthracite, or "stone coal," which occurs largely in South Wales, and is used in furnaces and malt kilns; semi-bituminous, or "steam coal," much used in marine and locomotive engines, being almost smokeless; bituminous, or "household coal," which is the common form of fossil fuel for domestic use; and lignite, known also as "brown coal," or "wood coal," an imperfect coal, not used in this country, though valued on the Continent. **Cannel** is a variety of coal which does not soil the fingers, and burns readily like a candle, whence the name. It occurs abundantly near Wigan, and is highly valued for gas-making. The vegetable origin of coal is fully established by its chemical composition, microscopic structure, its mode of occurrence, and its associated fossils. Some coals, notably the "better bed" of Bradford in Yorkshire, are largely made up of resinous spores or minute reproductive bodies shed from the cones of fossil lycopods, or plants allied to modern club-mosses. Two kind of spores, known as *microspores* and *macrospores*, occur in certain lycopods, and similar bodies are found in coal. Some observers regard the larger bodies not as spores, but as sporangia or spore-cases. Certain kinds of coal seem to be largely made up of the mineralised bark of the coal-measure plants. Small deposits of coal may have been formed by vegetable matter drifted by streams, and buried in lakes or in estuarine deltas; but in most cases the vegetable matter must have grown *in situ*. The roots of the coal plants are often found in the "underclays" or fossil soils beneath the coal-seams. The principal coal fields of Great Britain are those of South Wales, Forest of Dean, Bristol and Somerset, Warwickshire, South Staffordshire, North Staffordshire, Shropshire, Denbigh and Flint, Lancashire and Cheshire, Cumberland, Yorkshire, Derbyshire and Nottinghamshire, Leicestershire, Durham and Northumberland, the Clyde Basin, Midlothian, Fifeshire, and Ayrshire. In Ireland good coal occurs in Tyrone and Antrim, but the resources are not well developed; the coal in the south of Ireland is chiefly anthracitic. The deepest coal-pit in Britain is at the Ashton Moss colliery, near Manchester (2,688 feet). In 1884 the amount of coal raised in the United Kingdom was 160,757,779 tons; 520,376 persons were employed under the Coal Mines Regulation Act. During the year there were 863 fatal accidents in our coal mines, resulting in 942 deaths. Our exports of coal in 1884 amounted to 23,354,474 tons.—The official report issued by the Board of Trade on the coal industry of the United Kingdom for the year is generally issued somewhat late in the succeeding spring—an inconvenient system, which has often been made the subject of complaint. The output during 1886, from all the indica-

tions, was no doubt higher than that of 1884, but there is nothing to show a considerable increase. For the eleven months ending November 30th, 1885, the exports were 21,094,865 tons, value £9,842,163, the average price being 8s. 11½d.; in the same period of 1884 the figures were 21,685,801 tons, £10,095,808 value, and about 9s. 3d. in price. In spite of the condition of the shipping trade, the figures as regards quantities are encouraging, especially when the details are examined; for the tonnage shipped for the use of our steamers abroad in the eleven months of 1885 amounted to 6,138,905 tons, and in the eleven months of 1884 to 6,083,997. Turning to another characteristic branch of the trade, during the first eleven months of 1885 4,079,188 tons of sea-borne coal reached London, an increase of 281,386 over a similar period in 1884; and by rail 6,396,321 tons, an increase of 204,846 tons. The London quotations for Wallsend for 1885 show an average of 3d. per ton less than in 1884, which in turn were lower than those in 1883. A new departure is promised in the trade in the early future. South Wales for years past has been gradually coming to the front as a great coal-producing district, and already Cardiff rivals Newcastle as the leading coal port of the United Kingdom. In a return made to the Royal Commission on the Depression of Trade by the South Wales and Monmouthshire Collieries Association, it is stated that one half of the whole production was shipped at Cardiff, Newport, and Swansea, for consumption abroad. Direct railway communication between London and South Wales, so long desired, has at last been secured by the construction of the Severn Tunnel (see ENGINEERING), and the first coal train between these points was timed to run on Jan. 9th, 1886. What the introduction of the large supplies of the cheap Welsh fuel in the London markets may mean to the consumer, it is impossible to foretell. There is another relief promised to the Metropolitan coal buyer, in the opening up of the supply, *via* Hull, over the new railway across South Yorkshire. The great complaint from this field for many years has been that the heavy railway rates have acted in favour of the sea-borne coals from Newcastle. Hull in the future may prove a formidable rival to the older port on the eastern coast. In the spring of 1885 the Yorkshire mine owners, after a two months' strike, enforced a reduction in wages of 10 per cent., which was followed by a like drop in Derbyshire. One or two attempts were then made by the men to organise a general strike all the country over, in order to obtain better wages; their argument being that the low prices were merely the result of over-production. The matter was adjourned to be discussed in January 1886, as also was a proposal to arrange a sliding scale for South Yorkshire. In Northumberland and South Wales, where such conciliation boards exist, smaller reductions of wages occurred during the year, the last announced being that in Northumberland, and amounting to 1½ per cent., the average price of coal at the pit mouth being returned at 4s. 9½d. It may be added that the famous Great Eastern steamship, so long lying idle in Milford Haven, which was bought by a London and South Wales firm towards the end of 1885, was ordered to load 10,000 tons of coal for Gibraltar in January 1886, where it was understood she was to remain as a coal

hulk. Unhappily the deaths from mining explosions during 1885 were much in excess of late years, numbering 325 against 65 in 1884 and 134 in 1883. Nearly all of them in 1885 were due to naked lights or blasting operations.

Coal Dues. See MINING.

Coaling Stations, British. See BRITISH COALING STATIONS.

Cobain, Mr. Edward S. W. de, M.P., was b. 1840. Educated at Bell's Academy, Belfast. Formerly Grand Master of the Grand Orange Lodge of Belfast; is Deputy Grand Master for Ireland. Returned in the Conservative interest as member for East Belfast (1885).

Cobb, Mr. Henry P., M.P., was b. 1835. Educated at Hove House, Brighton, and Univ. Coll., Lond., where he graduated, taking mathematical honours. Returned as Liberal member for Rugby Division, Warwickshire (1885).

Cobbold, Mr. Felix Thornley, M.P., was b. 1841. Educated at Eton and King's Coll., Cambridge; was first-class in the Classical Tripos (1865). Called to the bar at Lincoln's Inn (1868). Is J.P. for Suffolk. Returned in the Liberal interest as member for North-West Suffolk (1885).

Cobden Club. The formation of this political association was suggested by Mr. Bright (*q.v.*) and Mr. Thorold Rogers (*q.v.*), within about a year of Cobden's death; and Mr. T. B. Potter (*q.v.*), who had long been an intimate personal and political friend of Cobden, and had been accepted as his successor in the parliamentary representation of Rochdale, undertook the task of organising the Club and of presiding over its work. The specific object for which the Club was established was that of "encouraging the growth and diffusion of those economical and political principles with which Mr. Cobden's name is associated"; and its motto, was suggested by Mr. Goldwin Smith, is "*Free Trade, Peace, Goodwill among Nations.*" Since the foundation of the Club more than a million and a half of books and publications enunciating Cobden's principles have been distributed at home and abroad; and during 1885 many millions of leaflets on Free Trade and other subjects akin to it were circulated, with a view of counteracting what is known as the "*Fair Trade*" (*q.v.*) movement. An important feature of the Club is its *annual banquet*, the presidents at which have been—Mr. Gladstone, Lord Houghton, Earl Russell, Mr. Villiers, the Duke of Argyll, Earl Granville, Mr. Milner Gibson, Mr. W. E. Baxter, M. Michel Chevalier, the Marquis of Hartington, Mr. W. E. Forster, the Earl of Northbrook, Earl Spencer, the Earl of Derby, Mr. Chamberlain, Lord Carlingford, and Sir C. Dilke. The roll of honorary members of the Association includes many distinguished foreigners. Secretary, Mr. Richard Gowing, 6, Upper Park Road, London, N.W.

Cobden, Mr. See ARBITRATION, INTERNATIONAL.

Cob-nut Trees. See FRUIT FARMING.

Coca (synonyms *Cuca*, *Hayo*, *Ipadu*, *Cochuco*, *Spadic*). The green leaves of the plant *Erythroxylon Coca*, 60—90 grs., either alone or mixed with lime or wood ashes, are chewed by the natives of Bolivia and Peru to allay hunger and thirst and prevent fatigue. The plant is now being cultivated in India. The properties of this drug are mainly due to its active alkaloid principle, *cocaine*, brought prominently to notice by Dr. Koller, of Vienna. It has lately been largely employed as a local

anæsthetic, more particularly in ophthalmic operations: a few drops of a 4 per cent. solution, applied at frequent intervals to the mucous membrane of the eyelids, produces insensibility to pain in about fifteen minutes, which lasts about twenty to thirty minutes, enabling the operations for cataract, iridectomy, strabismus, or the removal of foreign bodies, to be completed. It is also useful in obstetric practice for minor operations, and if injected hypodermically for operations on the skin, and in the form of pastilles it allays irritation in the throat.

"Cocker, According to." A phrase synonymous with "satisfactory, quite in order." It is derived from the name of Edward Cocker, an arithmetician and penman, who in the middle of the seventeenth century published a treatise on arithmetic, which was for a long time very popular. The phrase doubtless originally implied mathematical accuracy.

Coddington, Mr. William, M.P., of Wycoller, Blackburn, was b. 1830. Connected with the firm of Messrs. Coddington and Sons, cotton manufacturers. Is Deputy Lieutenant and J.P. for the county of Lancaster. Mayor of Blackburn (1874-75). Returned in the Conservative interest as member for Blackburn (1880-85); re-elected 1885.

Colenterata. See ZOOLOGY.

Coffee-House System. The modern coffee-house system was inaugurated with the "British Workman Public House" movement, promoted by Mr. and Mrs. Hind Smith, in 1867. At the "British Workmans" the working classes could resort in the evenings for reading, "free and easys," and unintoxicating refreshment. A number of houses of a better class, which provided hotel accommodation, were also opened; and 1875 saw the development of the *Cocoa-House system* in Liverpool, where a number of "temperance cafés" were instituted. The various coffee-house companies, which in recent years have sprung into existence in nearly all the principal towns in the kingdom, have erected elaborately fitted buildings—old public-houses having been previously principally utilised. The Liverpool, Bradford, Birmingham, Glasgow, Hull, and Sunderland companies have together a total of 170 houses, at which 432,000 customers consume weekly inexpensive and substantial refreshment in the shape of over £1,000 worth of breadstuffs, thousands of dozens of bottles of aerated waters, and hundreds of gallons of tea, coffee, cocoa, milk, and the many lately invented temperance drinks, to the amount of £250,000 per annum. One of these companies recently paid a dividend on the year of 15 per cent., three of 10 per cent., two of 7½ per cent., and that of the Glasgow company has for four years been 5 per cent. There are now probably about a hundred companies in Great Britain, with nearly 400 houses. In London, the Coffee Music Halls Company has fitted up the Royal Victoria Theatre for first-class music-hall entertainment; while the Central Club in the City provides for abstaining gentlemen. ("Report of General Conference," and *Coffee House News*, S. W. Partridge & Co., 9, Paternoster Row, London, E.C.; "Conference Broadsheet," Secretary Birmingham Co.)

"Coffin, Joshua." See NOMS DE PLUME.

Cohen, Mr. Arthur, Q.C., M.P., M.A. (Cantab.), was b. 1830, his mother being Justina Montefiore, sister of the late Sir Moses Monte-

we. Educated at Univ. Coll., London, and Magdalen Coll., Cambridge, where he was gently elected an Hon. Fellow. Fifth wrangler (1853). Called to the bar at the Inner Temple (1857). Created Q.C. and Judge of the Queen's Bench (1874). Appointed standing counsel to the Univ. of Cambridge in succession to Sir James Stephen. Was a member of the Commission on Unseaworthy Ships. Returned in the Liberal interest as member for Southwark (1880-85); West Southwark (1885).

Colman, Mr. Lionel Louis, M.P.; was b. 1839. Is manager of the London Stock Exchange, and a Deputy Lieutenant for the City of London. Engaged on the Royal Commission on the Depression of Trade. Returned in the Conservative interest as member for North Farringdon (1885).

Colchester, Reginald Charles Edward Esq., 3rd Baron (creat. 1817); b. 1842; succeeded his father in 1867. Educated at Eton, and at Christ Church, Oxford, where he was first class in classics, and also in law and history (1863); obtained the Stanhope prize; became Fellow of All Souls' (1864), and graduated M.A. (1865). Called to the bar at Lincoln's Inn (1867); appointed one of the examiners in the School of Law and Modern History in Oxford University (1869); a Charity Commissioner (1880-83). The 1st peer was Speaker of the House of Commons for fifteen years.

Coleridge, The Hon. Bernard, M.P., eldest son of Lord Coleridge, Lord Chief Justice of England, was b. 1851. Educated at Eton and Trin. Coll., Oxford, where he graduated (1875). Called to the bar (1877) at the Middle Temple. He is Junior Counsel to the Post Office, Western Circuit. Returned in the Liberal interest as member for Attercliffe Division, Sheffield (1885).

Coleridge, John Duke Coleridge, P.C., 1st Baron (creat. 1873); eldest son of the late Right Hon. Sir John Taylor Coleridge, of Heath's Court, Ottery St. Mary, Devon (a judge of the Court of Queen's Bench), by Mary, dau. of Dr. Albert Buchanan, vicar of Woodmansterne, and rector of Northfleet; b. 1821. Educated at Eton and at Balliol College, Oxford; B.A. (1842), M.A. (1846), Hon. D.C.L. (1877); was scholar of Balliol and Fellow of Exeter. Called to the bar at the Middle Temple (1846); made a Queen's Counsel and bencher of his inn (1861); a serjeant-at-law (Nov. 1873); was Recorder of Portsmouth (1855-65), when he resigned. Was M.P. for Exeter (July 1865 to Nov. 1873); was Solicitor-General (Dec. 1868 to Nov. 1871); Attorney-General from the last date to 1873, when he was appointed Chief Justice of the Common Pleas; and made Lord Chief Justice of England (1880). Paid a visit to the United States in 1883, and was very cordially received, particularly by the judiciary and the bar. He has contributed to the *Edinburgh Review* and other periodicals.

Collings, Mr. Jesse, M.P., was b. 1831. Has been head of the firm of Collings and Wallis, merchants, of Birmingham. He is Alderman and J.P. for Birmingham; Mayor (1878-9). He was one of the founders of the Education League at Birmingham. President of the National Federation of Liberal Associations (1880). Returned in the Liberal interest as member for Ipswich (1880-85); re-elected 1885. Moved the resolution which occasioned the defeat of the late Conservative Government (January 26th, 1886); Secretary to the Local Government Board (Feb. 1886).

Colman, Mr. Jeremiah James, M.P., of Carrow House, Norwich, was b. 1830. Is a Deputy Lieutenant of Norfolk, and J.P. for Norfolk, Suffolk, and Norwich. Sheriff of Norwich (1862); Mayor (1867). Head of the firm of J. and J. Colman, mustard manufacturers. Returned in the Liberal interest as member for Norwich (1885).

Cologne Conference. See INTERNATIONAL ARBITRATION.

Colombia. A Federal republic formed by the union in 1861 of nine states—viz., Antioquia, Bolivar, Boyaca, Cauca, Cundinamarca, Magdalena, Panama, Santander, and Tolima—under the title of the "United States of New Granada," changed in 1871 to that of the "United States of Colombia." The constitution vests the executive power in a president, elected triennially, and the legislative in a Senate of twenty-seven members, three from each State, and a House of sixty-six representatives, elected according to population. Area, 504,773 square miles. Pop. about 4,000,000. Revenue in 1882-3 about £1,200,000; expenditure about £1,800,000. External debt, chiefly due to English creditors, about £2,250,000, interest five or six years in arrear. Treasury in a state of bankruptcy. Army in peace nominally about 4,000. In 1876-7 a civil war prevailed, but with the exception of a few local disturbances, peace has since been maintained until the past year (1885), when an insurrection was reported in January; order, however, was soon afterwards restored. The transit trade passing over the Isthmus of Panama is of some importance, and in Feb. 1881 an inter-oceanic canal was commenced by M. de Lesseps, and is steadily progressing. In 1882 and 1884 the claim of the United States to the control of any American inter-oceanic canal was the subject of conference between that Government and Great Britain with reference both to the Lesseps scheme and a project of an alternative canal through Nicaragua. Diplomatic relations with States broken off Dec. 17th, 1885, owing to the arbitrary proceedings of the local authorities against Italian residents.

Colonial Office. See CIVIL SERVICE.

Colonial Troops. See NEW SOUTH WALES.

Colonial Woollen Industry. See WOOLLEN AND WORSTED MANUFACTURES.

Colonisation Movement, The German. See GERMANY.

Colour Blindness, or Achromatopsia, is a defect in appreciation of colour, shown by a want of power in distinguishing between certain complementary colours. Those so affected regard as similar colours which to most people are quite distinct. It depends either upon disease of the optic nerve, or it is congenital, and is often hereditary. It is very rare in women, but is said to occur, in varying degrees, in from 3 to 5 per cent. of the males of the chief European countries. It is usually partial, and the commonest form is that in which there is inability to distinguish green from the various shades of grey and red. Blindness for yellow and blue is much rarer, but it is occasionally total. Persons so affected often compensate for their defect by a finer appreciation of shade and texture; and many persons may appear colour-blind from want of exact knowledge of the names of colours. The testing of colour-blindness is usually done by using *Holmgren's coloured wools*. A certain colour having been given to the person, he is

asked to choose from the whole mass of wool skeins, no two of which are really quite alike, all those which appear to him of nearly the same shade. In Germany all engine-drivers, signalmen, and others, to whom an accurate knowledge of colour is essential, are officially examined previous to their appointment, in order to ascertain the exact condition of their colour-sense.

Colquhoun, A. R., and Hallet, H. S., The Messrs. See ENGINEERING.

Colquhoun, Mr. John. See BOOK TRADE.

Columbia Market, The. A fish-market in Bethnal Green, London, E., erected by Lady (then Miss) Burdett-Coutts, in 1869, at a cost of about £200,000. It was opened on February 21st, 1870, and was on November 3rd, 1871, presented by Lady Burdett-Coutts to the City of London, who, however, gave it back to her on December 4th, 1874. Owing to the older claims and competition of the Billingsgate Market (*q.v.*), it has never proved a success, although it was liberally supported by reduced freights, etc., on the part of the G. E., G. N., and Midland railways in 1875. It was closed from April 1878 to Aug. 1884, when it was reopened, and is now said to be more flourishing.

Column Stakes. See RACING.

Colville of Culross, Charles John Colville, P.C., 11th Baron (creat. 1609); b. 1818. Elected a representative peer of Scotland (1851).

Combermere, Wellington Henry Stapleton Cotton, D.C.L., and Visct. (creat. 1814); b. at Barbados 1818; succeeded his father in 1865. Was M.P. for Carrickfergus (1847-57). The 1st Visct. was the celebrated military commander, who was elevated to the peerage and was awarded the thanks of parliament, together with an allowance of £2000 per annum for two lives, for his services in the Peninsula, and received the viscounty for his services at the capture of Bhurtpoor.

Combet, Dr. Louis. See ENGINEERING.

Comets. See ASTRONOMY.

Comité d'Etudes du Haut Congo. See CONGO FREE STATE.

Comites. See ARMY.

Commemoration, Days of. The Black-Letter Saints' Days of the Anglican Calendar. No special collect, epistle, and gospel are appointed.

Commerell, Vice-Admiral Sir John Edmund, M.P., V.C., K.C.B., was b. 1829. Entered the Royal Navy (1842), and served in China, South America, and the Crimea. Has held the following appointments: Naval Aide-de-camp to the Queen (1872), Groom-in-waiting (1874), Junior Lord of the Admiralty (1879), Commander-in-Chief on the American and West Indian stations (1882). Returned in the Conservative interest as member for Southampton (1885).

Commings, Dr. Andrew, M.P., LL.D., was b. 1832. Educated at Queen's Coll., Cork. Called to the bar at Lincoln's Inn (1860). He is an LL.D. of London. Returned as a Nationalist for Co. Roscommon (1880-85); re-elected, South Roscommon (1885).

Commissionaires, frequently called *Commissioners*, are public street messengers of Parisian origin. At first they were selected from the wounded soldiers pensioned after the Crimean and Indian wars. They receive their appointment from a society which was established by Captain E. Walter in 1859, and which regulates their charges. Their number is now about 750.

Committee of Revision, The. See REVISION BIBLE, THE.

Committee of Supply. See PARLIAMENTARY PROCEDURE.

Committee of Ways and Means. See PARLIAMENTARY PROCEDURE.

Common Law. The Common Law has often been described as that immemorial and unwritten customary law, which dictated the decisions of those ancient Courts of King's Bench, Common Pleas, and Exchequer, in later times grouped under the name of Courts of Common Law. In reality the Common Law is an enormous accretion of law in the form of judicial decisions given by the judges of those courts in the course of several centuries. It is neither a complete nor a systematic body of law. It doubtless had a nucleus of primitive custom, and has been modified very largely by legislation, in the form of Acts of Parliament. Its early development is obscure, but its characteristic principles had been elaborated before the close of the fourteenth century. The Common Law is contrasted with (a) the statute law contained in Acts of Parliament; (b) equity, also an accretion of judicial decisions, but formed by a new tribunal, which first appeared when the Common Law had reached its full growth, and which administered justice upon new principles; (c) the civil law, inherited by modern Europe from the Roman empire, and never recognised as of authority in England, although, through the agency of the old ecclesiastical courts and courts of equity and admiralty, many of its provisions have been gradually introduced into our law. At the present day the Common Law is in a state of rapid disintegration, owing to the following causes: (a) the consolidation of all the superior courts of justice into one Supreme Court of Judicature, and the consequent obliteration of distinctive modes of procedure and distinctive legal habits of thought; (b) the extreme activity of the Legislature, whose acts embody the ideas of an entirely modern society.

Commons, House of. See HOUSE OF COMMONS.

Commune, La. The revolution of that name in Paris, 1871, shortly after the Franco-German war. It was entirely political, and confined to Paris, and propounded no new economical theories. It arose from a joint effort of many sections of extreme politicians striving after the establishment of a democratic republic, and the communal (or corporate) independence of Paris. Only about seven out of the seventy members of the Communal Government were communists in the economic sense, and these seven were among the more thoughtful and less violent of their party. They never, however, had an opportunity of giving an official sanction to their communistic views, and were gradually thrust on one side by their more violent and unscrupulous comrades. The rising in 1871 was based on no well-defined dogmas, but was the consequence of political accidents which led to much bloodshed and the wanton destruction of a great amount of property. The Commune was suppressed by the administration of M. Thiers.

Companies, Joint Stock, some Statistics of:—

In 1883				
1759	lim.	Cos.	were registered.	
3	unlim.	"	"	"
2	"	"	"	"
				but formed as lim.

Oct. 3rd, 1862, to Dec. 31st, 1883:

20,670 lim. Cos. were registered.

293 unlim. " " " "

1881-2-3:

£211,000,000 average nom. capital per annum.

1883-4-5:

£194,000,000 " " " " "

1886-7-8:

£18,000,000 " " " " "

(Period of great "depression following" scare of 1866.)

Dec. 1885:

8,641 registered Cos. at work, with paid-up capital of £2,571,723,184.

From these few figures it is obvious that many companies have but short lives. This is specially clear from figures for 1883, in which year 1766 companies were registered, with a nominal capital of £167,680,187, though the calls amounted to only £25,142,446 (on 600 nothing was paid up).

Comparative Anatomy, Elements of. See ZOOLOGY.

Compensation for Improvements. See AGRICULTURAL HOLDINGS.

Compensation for Improvements (Ireland) Bill, 1884. A bill introduced by Colonel Nolan and other Irish members for the purpose of insuring compensation for improvements to tenants of holdings not agricultural or pastoral in character. It proposed to extend § 4 of the Landlord and Tenant (Ireland) Act, 1870, to any holding rated at not more than £50, and to incorporate §§ 31 and 32 of the County Officers and Courts (Ireland) Act, 1877. It was to have been construed as one Act with the Landlord and Tenant Act, 1870, and the Land Law Act, 1881, and any Acts amending the same. It was not to have applied to any holding situate in a town containing upwards of 20,000 inhabitants.

Complexity of Certain Organs. See ORIGIN OF SPECIES.

Composts. See MANURES.

Compound. See ATOMS AND MOLECULES.

Compound Radicles. See ATOMS AND MOLECULES.

Compton, Mr. F., M.P. sixth son of the late Mr. Henry Combe Compton, M.P., of Minstead Manor House, Lyndhurst, b. 1824. Educated at Merton College, Oxford, where he graduated M.A. Sometime Fellow of All Souls'. Called to the bar at Lincoln's Inn and the Middle Temple (1850). J.P. for Hants. Returned in the Conservative interest as member for South Hants (1880-85); New Forest Division, Hants (1885).

Compton, Lord William George Spencer Scott, M.P., second son of the Marquis of Northampton, was b. 1851. Educated at Trin. Coll., Cambridge. Third secretary in the Diplomatic Service, and was engaged in the Marquis of Northampton's special mission in Spain (1881). Private secretary (1880-2) to Earl Cowper, Lord Lieutenant of Ireland. Returned in the Liberal interest as member for Stratford-on-Avon Division, Warwickshire (1885).

Compulsory Assessment. See PAUPERISM.

Concert Pitch. See PITCH.

Concerts, Popular. See MUSIC OF 1885.

Condensed Milk. See DAIRY FARMING.

Condon, Mr. Thomas J., M.P. is a Town Commissioner and Poor Law Guardian. Returned as a Nationalist for East Tipperary (1885).

Conduction. See HEAT.

Confucianism. The name commonly given to the State religion of the Chinese Empire, from Confucius (Khung-fu-tsze, "The Master Khung," B.C. 551-478), the most celebrated of its sages. He was not, however, the author of the religion or of its moral teachings, but only their prophet. He said of himself that he was "a transmitter and not a maker," but he so identified himself with the more ancient institutions, and contributed so much to the preservation of the histories and other literary documents from which we learn all we know of them, that the entire system has come to be called by his name. This is in one respect unfortunate. His sayings on human duty, especially his repeated inculcation of the golden rule, though in a negative form, his exhibition of the five social relationships of husband and wife, parent and child, elder brother and younger, ruler and subject, friend and friend, and of the duties severally belonging to them, have especially attracted the attention of European and other thinkers, and made them think and often say that Confucianism is only a morality and not a religion. But no representation could be farther from the truth. Many of Confucius' deepest and highest utterances were of a religious nature, and the personal cultivation and social obligations on which he delighted to dwell were all to be the fulfilling of the will of Heaven or God, who has given to man the moral constitution by which he is made a law to himself. In the religion of China there is a belief in one Supreme God and the worship of Him. He has appointed government by rulers for the good of all, and instruction by sages and intelligent teachers to make all acquainted with His will. The reverent fear of Him and obedience to Him are due from all, but the formal worship of Him is restricted to the Sovereign of the Empire as the parent of the people. Along with this worship of God there prevails the worship of ancestors by all classes of the people from the highest to the lowest; and in connexion with this filial duty is celebrated as the chief and crown of all the virtues. Beyond the family and relative circle worship is to be rendered also to the great and good of all times, such as wise lawgivers, philanthropists and benefactors of society, and distinguished patriots. The worship is paid in what are called sacrifices, for the purposes of prayer, thanksgiving, and deprecation; but there does not enter into them the idea of vicarious substitution, propitiation, or atonement. The various offerings of meat and drink, flowers, silk, incense, and other articles, are the means by which communication and communion with spiritual beings are effected. These services of course imply the existence of spirits generally, and of the spirits of the departed. At death the body and the animal soul go downwards, and the intelligent spirit is on high. But on the subject of retribution in the future Confucianism is silent. Various corruptions have arisen at times both of the religion and morality of China, but they have never permanently obscured the principles indicated above; owing, no doubt, to the wide diffusion of education throughout the Empire, and the universal study of the Confucian books. This also has prevented the rise of mythology and idolatry to the same extent as in other countries. Endeavours to account for the worship of God and of ancestors from an earlier animism and nature-worship (see ANIMISM) are mere speculations, for which the reliable records

of the people do not appear to afford any sufficient grounds.

Congleton, Henry William Parnell, 3rd Baron (creat. 1841); b. 1809; succeeded his bro. in 1883. Formerly in Royal Navy; present at battle of Navarino. The 1st Baron, better known as Sir Henry Parnell, was Secretary at War (1812-2), and Paymaster-general of the Forces, Treasurer of the Navy and Ordnance (April 1835 to June 1841).

Congo Free State. The mouth of the Congo river was known to the Portuguese in 1485, but not until 1816 was anything done to explore it. In that year the British Government dispatched an expedition under Captain Tuckey, who succeeded in getting up the great river 172 miles, and obtaining accurate information about it so far. Till 1877 "Tuckey's Farthest" remained the limit of our knowledge. In 1867, however, Livingstone, exploring the country between Lakes Nyassa and Tanganyika, discovered a great river rising in the Chibalé hills, named Chambezi. He followed it to Lake Bangweolo, whence it emerged as the Luapula, thence to Lake Moero, whence it was called Lualaba, and then north to a place called Nyangwé, in Manyema, 1,500 miles from its source. He believed it to be the Nile. In 1876 the *New York Herald* and the London *Daily Telegraph* dispatched an expedition under the truly heroic and enterprising Stanley. By him the exploration of the unknown stream was taken up at the point where Livingstone had left it. After surmounting innumerable obstacles, and successfully encountering terrible risks, Stanley succeeded in following the river of Livingstone to its outlet as the Congo, 1660 miles beyond Nyangwé. Thus, in 1877, one of the greatest water highways of the world was made known to civilisation and commerce (consult Stanley's "Through the Dark Continent"). At the end of 1878 a "Comité d'Etudes du Haut Congo" was formed at Brussels, under the presidency of Colonel Strauch, and with the warm co-operation of Léopold II., King of the Belgians. The Comité was of an international character, and it appointed Mr. Stanley to carry out its intentions; it was a special branch of the International African Association, which had been founded in 1876 by King Léopold, and had committees in all leading countries, and had already gone to work in East Africa. Mr. Stanley proceeded to Zanzibar to organise expeditions, then forming secure routes to Tanganyika, and to recruit for his own. In August 1879 he arrived with his Zanzibaris at the mouth of the Congo, coming there by sea, commissioned by what was now the "Association Internationale du Congo" to open up the river and endeavour to form a free negro state under European tutelage. He was assisted by a band of European associates, besides native recruits, and had a flotilla of small steamers. First station established at Vivi, 110 miles up, limit of maritime navigation. Thence roads were constructed past the Yellala and Livingstone cataracts, in spite of apparently insuperable difficulties, and steamers were hauled up to the upper Congo. The station of Léopoldville was then formed on Stanley Pool (1882). From this point there is uninterrupted navigation for steam-vessels to Stanley Falls, 1068 miles higher up. The great affluents already explored give a total of 6,000 miles of waterway accessible from the Pool, and this may

probably be increased to 14,000 by further exploration. The area drained by this section of the great river is estimated at 1,090,000 sq. miles, with a pop. of 40 per sq. mile. By tact and persevering kindness the hostility of the natives has been overcome, and for the most part they now welcome the white man. Numerous stations have been formed between Léopoldville and Stanley falls. The following is a table of distances along the Congo, as prepared by Mr. Stanley:—

	Miles.
Banana (Congo mouth) to Vivi, navigable for ocean steamers	110
Vivi to Isangila, by road past cataracts	50
Isangila to Manyanga, navigable water	88
Manyanga to Léopoldville, by road past cataracts	84
Léopoldville to Stanley Falls, navigable	1068
Above Stanley Falls to Nyangwé, navigable	389
Nyangwé to Lake Moero	140
Lake Moero	67
Lake Moero to Bangweolo	220
Lake Bangweolo	161
Bangweolo to Chambezi sources	304

Total length of Congo highway . . . 3034
Mr. Stanley earnestly advocates the formation of a railway from Vivi to Léopoldville, to connect the navigation of the upper Congo with the sea. The distance is 235 miles, and the cost is estimated at about £1,000,000. By his showing such a railway would be one of the best paying speculations in the world, and there is little doubt the enterprise will be ere long an accomplished fact. In 1884-5 the Association entered into treaties with all the Great Powers, by which its status as a sovereign power was recognised. At the same time the boundaries of the new Congo Free State were settled (see BERLIN CONFERENCE). These are defined on recent maps, of which an excellent one will be found in Stanley's "The Congo, and the Founding of its Free State"; a work which should be consulted for further details. Colonel Strauch is president of the Association in Europe, and Col. Sir Francis de Winton has now replaced Mr. Stanley as its chief administrator on the Congo.

Congo Highway. See CONGO FREE STATE.
Congo Railway Syndicate. See ENGINEERING.

Congo River. See CONGO FREE STATE.
Congregational Church Aid and Home Missionary Society. See CONGREGATIONALISM.
Congregationalism. This is the democratic form of church life. It is based upon three ideas: the right of each individual to take part in the government of the community; the autonomy of the local church; and its independence of all external ecclesiastical authority. While complete in itself, the local church may voluntarily unite with other churches for consultation and common action. But no resolution of any such union binds the individual church without its own consent. Usually each church has one minister or pastor, who is chosen by the free suffrages of the membership but there is nothing to prevent there being more than one, and in fact such cases are no uncommon. In addition to the pastor or pastors, home missionaries and evangelists are sometimes appointed, whose work is distinct from, though subject to the supervision of the regular pastorate. Congregational polit

admits two orders of church officers only: bishops, elders, or pastors, who are the presidents or administrative rulers in the spiritual department of church life; and deacons, who have charge of its secular affairs. It claims to be of apostolic origin, and to be at once the highest and most natural organisation of the life of the Christian Church. It presupposes the Christian character of all members of the church, and requires a credible profession of faith in Christ. There are in the British Isles 4,589 Congregational churches, branch churches, and mission stations, with about 2,800 recognised and accredited ministers, in addition to upwards of 300 evangelists. In England and Wales alone there are 4,347 places of worship, with accommodation for 1,904,438 persons. County or district associations of these churches exist for the purpose of upholding and extending evangelical religion, of promoting the spiritual intercommunion of the churches, strengthening their fraternal relations, facilitating co-operation in everything affecting their common interest, aiding weak churches, and carrying on mission work within their respective areas. The **Congregational Church Aid and Home Missionary Society** expends in mission work through the county unions upwards of £36,000 per annum. There is also a general union of the churches, known as the **Congregational Union of England and Wales**, which in 1881 celebrated its jubilee by originating a fund for church extension, paying off church and chapel debts, and for evangelistic and home missionary purposes. The sum raised in connection with this celebration amounted to nearly £400,000. There are fifteen colleges belonging to the denomination in the three kingdoms, in which between 400 and 500 students are being trained for the regular ministry. Various societies have been formed for church extension; and for conducting mission work. In connection with their operations an amount of over £4,001,300 has been expended. The British Congregational churches raise for the support of religious worship, and for philanthropic purposes, in connection with their own organisations, upwards of £1,000,000 per annum. Congregationalism is also a prominent form of church life in the United States of America, throughout the British dependencies, and in other parts of the world. Offices of the Congregational Union, Memorial Hall, Farringdon Street, E.C.

Congregational Union of England and Wales. See CONGREGATIONALISM.

Congress (Spanish). See SPAIN.

Congreve Rocket. See APPENDIX.

Conjugal Rights, Restitution of. When either the husband or the wife has withdrawn from cohabitation without being able to allege any lawful reason, there is ground for an application for the restitution of conjugal rights. But a written demand for cohabitation must first be made, and if the respondent is willing to comply with it he or she may obtain a stay of proceedings. Should the respondent prove obstinate, the petitioner is entitled to a decree unless the respondent can prove some conjugal offence on the part of the petitioner which would be a ground for a decree of judicial separation. Formerly in case of non-compliance the Court enforced its decree by issuing an attachment. But by the Act 47 and 48 Vict., c. 68, it is provided that such attachment shall no longer issue. If the application has

been made by the wife, the Court may, at the time of making its decree, order that in the event of non-compliance the husband shall make to the petitioner such periodical payments as the Court shall think proper. If the application has been made by the husband, and it has been made to appear that the wife is entitled to any property, the Court may order such property or any part thereof to be settled for the benefit of the petitioner or of the children of the marriage. If the respondent continue obstinate, he or she is to be deemed guilty of desertion without reasonable cause, and a suit for judicial separation may forthwith be instituted by the petitioner. Obstinance on the part of the husband coupled with adultery enables the wife to present a petition for dissolution of marriage.

Connaught and Strathearn, H.E.H., Prince Arthur William Patrick Albert, P.C., K.G., K.T., K.P., G.C.S.I., G.C.M.G., 1st Duke of (creat. 1874), was b. 1850. The third son of the Queen. Mar. the Princess Louise Margaret, youngest dau. of Prince Frederick Charles of Prussia (1879). Commanded a Division in the Egyptian Expedition (1882). Holds a similar command in the Bengal Presidency (1886).

Connolly, Mr. Lawrence, M.P. He is engaged in business at Liverpool as a fruit dealer. Proprietor of the Aquarium and Casino for Public Dancing, New Brighton. Returned as a Nationalist for South Longford (1885).

Conservative Republicans. See FRENCH POLITICAL PARTIES.

Conservatives, German. See GERMAN POLITICAL PARTIES.

Constabulary Returns. See APPENDIX.

Constantinople. The capital of Turkey, situated on the waterway between the Black Sea and Mediterranean. It has long been coveted by Russia, and attempts to possess it have been the cause of expeditions for the last thousand years. Gradually Russia, in less than a century, has secured the greater part of the Black Sea coast, from the Danube to Batoum, and still adheres to her traditional policy to secure the remainder. The population of Constantinople exceeds a million, and is, therefore, larger than that of any Russian city. To protect it, the Berlin Treaty left on the European side a portion of territory about the size of England and Scotland combined (80,000 sq. m.), and a population of 5,250,000. In Asia the Sultan still controls 27,000,000, but only a small proportion lie between Constantinople and Kars. How long Constantinople could be defended against a Russian attack, if England held aloof, would depend largely upon the moral condition of the Porte at the time being; but the place is admittedly capable of prolonged resistance, and, if England co-operated, could effectually beat off an enemy. This was what Skobelev recognised in 1876, before he took part in the Turkish war; and in the plans for an Eastern campaign he subsequently drew up, he laid it down as a fundamental principle that Constantinople should not be attacked again until Russia was able to coerce England by taking up a strong military position in Afghanistan. The seizure and development of Herat was to precede the final war for Constantinople. While this policy has been in process of realisation, the Austrian movement towards Salonica (*q.v.*) has developed, and signs are apparent that she may ultimately lay claim to

Constantinople in the interest of the German race, or, at any rate, keep Russia out of it. To Russia, the term "Constantinople" has an expansive meaning, practically including all Asia Minor and the Balkan peninsula.

Constitution, 16th April, 1871. See GERMANY.

Constitutional Club, The. See CONSTITUTIONALIST.

Constitutionalist, a self-applied term by a body of Conservatives shortly before the general election of 1868. The **Constitutional Club**, under the presidency of Lord Salisbury, was established in 1883. See POLITICAL PARTIES (ENGLISH).

"Constitutionnel" (French Journal). See THIERS, LOUIS ADOLPHE.

Consubstantiation. See REAL PRESENCE.

Consul, A. is a diplomatic agent appointed to advise upon and protect the interests of traders of his own country in the foreign town at which he is resident, to certify and attest acts and documents, and to report upon the trade of the country to his Government. He may further celebrate marriages of the subjects of his own sovereign under foreign jurisdiction, and take evidence on oath respecting crimes committed on board vessels of his own nationality. A **Consul-General** is a consul who at the same time holds a post of *Chargé d'affaires*. Consuls were first appointed in the sixteenth century.

Contagious Diseases Acts, 1866, 1869. The object of these Acts is the prevention of venereal disease at certain naval and military stations. It is provided that where an information on oath is laid before a justice by a superintendent of police to the effect that a woman therein named is a common prostitute, and either resides within the limits of any place to which the Acts apply, or residing within ten miles of those limits, or having no settled place of abode, has been for purposes of prostitution either within those limits or in company with men residing within them, the justice may serve her with notice that the truth of the information will be inquired into. If satisfied of its truth the justice may then order that the woman be subject for not more than a year to a periodical medical examination. She is to be examined in accordance with the order by a visiting surgeon appointed under the Acts, and if found to be diseased is liable to detention in a hospital certified under the Acts. She is to be detained there for treatment by the chief medical officer of the hospital until he discharges her by writing under his hand. No woman is to be detained under a surgeon's certificate longer than three months, unless under a joint certificate by the chief medical officer and the inspector of certified hospitals (or the visiting surgeon) that further detention is requisite for her cure; in which case she may be detained, but not longer than nine months under any one certificate. A woman desiring to be relieved from periodical medical examination must apply in writing to a justice; and if upon hearing her application it be shown that she has ceased to be a common prostitute, or if with his approval she enters into a recognisance with or without sureties for her good behaviour during three months following, he shall order her to be relieved. Otherwise the order remains in force so long as the woman resides within ten miles of the limits of the place to which the Acts apply, but not in

any case for more than a year. Any woman refusing or neglecting to comply with an order for medical examination, or whilst under treatment in a hospital quitting it without a discharge in writing by the chief medical officer refusing to comply with its regulations, is liable on summary conviction to imprisonment with or without hard labour. For other provisions consult the text of the Acts. They apply to the following naval and military stations: Aldershot, Canterbury, Chatham, Colchester, Dover, Gravesend, Maidstone, Plymouth and Devonport, Portsmouth, Sheerness, Shorncliffe, Southampton, Winchester, Windsor, Woolwich; and in Ireland the Curragh, Cork and Queenstown.

Contagious Diseases (Animals) Acts, 1878 and 1884. The Act of 1878 contains virtually all the statute law relating to the prevention of the above diseases. It provides for the appointment of veterinary inspectors, who have power subject to confirmation by the local authority, Privy Council, to declare a place infected. The Privy Council in cases of cattle plague, and the local authority in case of pleuro-pneumonia, are to cause all infected cattle to be slaughtered at the owner receiving compensation. The Privy Council has power to make orders respecting the transit of infected cattle, areas infected with disease, slaughter, compensation, registration and inspection of dairies, and the landing of foreign animals. The local authority may provide wharves, &c., for the purpose last named. It is to appoint inspectors and provide compensation, and has power to levy rates and borrow for the purposes of the Act. Offences against the Act are punishable upon summary conviction by fine. With certain administrative modifications, the Act extends to Scotland and Ireland. Under it many Orders in Council have been issued, and the text of these and of the Act must be consulted for precise information. There are two Acts of 1884 relating to this subject: the one, chapter 13, empowers the Privy Council to prohibit the landing of animals from any foreign country, and requires them to do so if not satisfied that the circumstances afford reasonable security against the importation of diseased animals; the other, chapter 47, provides for the transfer of powers from one authority to another, and the formation by agreement of united districts.

"Contemporary Pulpit" (monthly 6d.). Founded January 1884. Furnishes in its pages selected sermons from the greatest living preachers of the day; giving, in addition, exegetical outlines by experienced divines on texts for the Church's year, with copious references to all available sources of information.

"Contemporary Review" (monthly 2s. 6d.). Founded January 1866. First editor, **Dean Alford**. The *Contemporary Review* has for eighteen years occupied a foremost place amongst the periodicals of Europe. Its pages furnish an arena for the discussion of the great questions of modern controversy, and it includes among its contributors some of the most distinguished names. It also prints a contemporary record of the religious, political, and social movements of the world, with reviews of the best new books. Its present editor is **Mr. P. W. Bunting**.

Contempt, Committal of Members of Parliament for. See PRIVILEGES OF PEERS AND MEMBERS.

"Continued Irrelevance." See PARLIAMENTARY PROCEDURE.

Convention of February 1884. See BECHANALAND.

Convocation. The clerical parliament of the national Church. Was prorogued in 1717, and did not meet again till the year 1850, when it once more found voice, after a silence of 135 years. Sits now yearly. First sat in its present form in the fourteenth century. (Convocations or Synods without the authority of the Crown date from the very earliest times.) It consists of two Houses—the Upper and Lower. There is also a separate Convocation for each of the two great ecclesiastical divisions of England, called provinces. The **Upper House of Canterbury**, of which the Archbishop is president, consists of the Bishops of London, Winchester, Bangor, Bath and Wells, Chichester, Ely, Exeter, Gloucester and Bristol, Hereford, Lichfield, Lincoln, Llandaff, Norwich, Oxford, Peterborough, Rochester, St. Albans, St. Asaph, St. Davids, Salisbury, Southwell, Truro, and Worcester. The **Lower House** is composed of the Deans and Archdeacons of the various dioceses of the province, assisted by Proctors, who are elected to represent (1) the cathedral chapters, and (2) the minor clergy. The Archbishop is president, but is represented by the prolocutor, the Ven. Archdeacon George H. Sumner, M.A. The **Upper House of York**—president, the Archbishop—consists of the Bishops of Durham, Carlisle, Chester, Liverpool, Manchester, Newcastle, Ripon, and Sodor and Man. The **Lower House** comprises the Deans and Proctors, with the Very Rev. A. P. Purey-Cust, D.D., as prolocutor. In Convocation are discussed, and resolutions passed upon, all matters affecting the interests of the Church, both doctrinal and administrative, as also the spiritual welfare of the nation at large. But any resolutions which suggest an alteration in the services, rites and ceremonies, or the rubrics of the Church service, as contained in the Book of Common Prayer, cannot be discussed in Convocation with the purpose of making such alterations, either in the Prayer-Book or in the Canons, without the Queen's Licence and Letter of Business, giving them the authority so to do, having been first obtained. And no such alteration made by such authority can be adopted and put in force without the authority of both Houses of Parliament. This is regarded by many as an undue interference of secular with religious authority, while others hold it to be a great national safeguard.

"Conway, Hugh." See FARGUS, MR. J. F., and NOMS DE PLUME.

Conway, Mr. Michael, M.P., was b. 1844. Has been actively engaged for twenty years in the work of education. President of the Blackburn branch of the National League. Returned as a Nationalist for North Leicestershire (1885).

**Conybeare, Mr. Charles Augustus Van-
sittart, M.P.**, was b. at Kew, 1853. Educated at Tonbridge and Oxford, and was called to the bar at Gray's Inn (1881). He is an hon. sec. of the Social and Political Education League. Returned in the Liberal interest as member for N.W. Cornwall (1885).

Conyers, Sackville George Lane-Fox, 12th Baron (creat. 1509); b. 1827; succeeded in 1859.

Conyngnam, Henry Francis Conyngnam, 4th Marq. (creat. 1816); Baron Minster (1821),

by which title he sits in the House of Peers; b. 1857; succeeded his father 1882.

Cook, Mr. Edward Rider, M.P., F.C.S., of Woodford House, Woodford; b. 1836. Educated at the City of London School, and at University Coll., London. He is a member of the firm of Edward Cook and Co., soap and chemical manure manufacturers, Bow. J.P. for Middlesex, representative of the Poplar District at the Metropolitan Board of Works. Returned in the Liberal interest as member for West Ham, North Division (1885).

Cook, Mr. William, M.P., was b. 1834. Elected Chairman of the Birmingham Health Committee (1875); Alderman (1882), Mayor (1883). He is J.P. for the borough. Returned in the Liberal interest as member for East Birmingham (1885).

Cooke, Mr. Charles Wallwyn Radcliffe, M.P. Educated at Emmanuel Coll., Cambridge. Called to the bar at Lincoln's Inn (1872). One of the founders of the Constitutional Union, and an advocate of British Imperialism. Returned in the Conservative interest as member for West Newington (1885).

Cooks. The Worshipful Company of. See CITY GUILDS.

Coolie, or Cooly, an unskilled Asiatic labourer, is a word of uncertain origin. It was first used in 1727 to describe labourers who unloaded Dutch ships at Nagasaki. Now it is used in Canton to designate all labourers in European factories. For many years, however, it has been employed almost exclusively to describe Indian and Chinese labourers who work under contracts of service on foreign plantations. The importation of Coolies is now a recognised trade chiefly in British and American lands. The Coolie is the product of the abolition of slavery in the West Indies. After that took place planters had but one of two alternatives open to them—either to abandon estates on which white men could not work, or import hired coloured labour. Free negroes, as a rule, refused to work on coffee and sugar estates. The over-peopled countries of India and China, where the touch of civilisation was overcoming the popular dread of emigration, were naturally the fields which were drawn upon by the Coolie importers. Hence we may divide Coolies into two classes—(1) **Chinese** (2) **Indians**.

(1) **Chinese Coolies.** The trade in Chinese Coolies was first recognised by the British Government in 1844, when Coolies were first introduced into Guiana under certain regulations. Peru and Cuba next followed our example—the usual terms made with the Coolie being \$17 a month, with food, clothing, and lodging. In 1856, ugly reports began to fly around that the worst horrors of the old "middle passage" of the slave trade were repeated in the Coolie traffic of Peru and Cuba—that, in fact, it was the slave trade in another guise. The most shocking scandals arose out of the treatment of Chinese immigrants from Hong Kong in the guano pits of **Chincha Island**. There the Coolies were forced to labour under the lash in pestilential spots till, maddened by torture, the poor wretches either poisoned themselves with opium, buried themselves beneath the falling banks of guano, or jumped over the cliffs into the sea. In 1860, of 4,000 Coolies who had up to then been imported to the Chincha Island, not one survived. The British Governor of Hong Kong, hearing of these scandals, peremptorily suppressed the

whole trade, and was subsequently indemnified by parliament for an act which was clearly in excess of his legal powers. After this, the lot of the Coolie was ameliorated by the **Chinese Passengers Act** (18 and 19 Vict., c. 104). No British ship was permitted to make more than one week's voyage with more than twenty Coolies on board, unless the most stringent regulations were complied with. To evade the Act, the Coolie traders transferred their business from Hong Kong to the Portuguese settlement at **Naoas**. The labour agents established depôts at that port called "**baccaroons**," and obtained their Coolies by kidnapping, or by buying prisoners from tribes at war with each other. In 1860 a convention was signed by the Governments of England, France, and China to regulate the Canton Coolie trade—one condition being that in all cases the Coolie's passage money must be paid for him if he desired to return home after the end of his term of service. The West Indians objected to this condition—for it was their desire to root a labouring class to their soil. Thus the Coolie trade between the West Indies and China ceased. (a) **Indian Coolies**. Before the end of the last century **Tamil labourers** used to emigrate to the Straits Settlements and Ceylon from Southern India, and from the other side of the Bay of Bengal to **Tenasserim**. During the ten years preceding 1860, 65,000 emigrants, 50,000 of whom were adult males, landed in Ceylon, the bulk of whom returned to their homes. In **Penang**, in a population of 150,000, there were 25,000 Coolies. In **Assam** Coolies were used in domestic service, farming, and in the tea gardens. In **Burmah** the dock labourers and porters were Coolies. In 1837 an Emigration Law passed for **Calcutta**, which was practically extended to all territories of the East India Company. It limited the contracted term of service to five years; enforced payment of passage money at the end of the term of service; and enacted that the meaning of the contract must be clearly explained in all its bearings by official authority to the Coolie before he signed it. The Indian Coolie trade with **Mauritius** reached such dimensions that it alarmed the Indian Government, who suspended it in 1858. It was resumed in 1862, when an Emigration Act was passed establishing Government agents at all ports, and ordaining that Coolies should not be shipped till forty-eight hours after their arrival at the port of embarkation. In 1844 the Indian Government sanctioned the emigration of Coolies to the West Indies, on condition that 12 per cent. of the shipments shipped were women—a regulation necessary in the interests of morality, but too often evaded by the Colonial Government. In 1853 Lord Dalhousie's Government extended the limit of the contract term from five to ten years. In 1857, in order to encourage the permanent settlement of the Coolie, the Colonial Government proposed to commute the payment of return passage money by land grants—but Lord Canning discountenanced the proposal. In 1859 the Indian Government sanctioned this commutation, provided it were voluntarily accepted by the Coolie. The treatment of Coolies of late has been greatly changed for the better. In the West Indies there are over 100,000 of them settled. Their family and religious customs are rigidly respected—children under fifteen years of age being per-

mitted to live with their parents. A bounty of £11 is offered for re-engagement. The medical officers are state officials, and quite independent of the planters. **Foreign Colonies of Coolies**. In foreign colonies the lot of the Coolie is a hard one. There is but a single exception—the plantations opened up near **Deli**, in **Sumatra**, by the pioneers from the Straits Settlements, who hold concessions from the Dutch Government. They are almost all Chinese Coolies, and the supply is kept up by a self-recruiting system—labourers being commissioned on their return to their homes in China to send out or bring back others. In **Ouba** the Coolies were so badly used that they joined the rebels, and the Spanish Government had to interfere to better their lot. In **French colonies** the Coolie is often very badly treated—in **Cayenne** there has been long a standing feud between our consular authorities and the French Government owing to maltreatment of Coolies claiming British citizenship. In the United States an attempt was made to import Coolies from China through **Nacas** to take the place of negro labour. It failed—the necessary capital not being forthcoming for the scheme. The importation of Chinese labourers to the Pacific Coast roused so much jealousy that Congress interfered two years ago, and made it an offence to land a Chinaman at an American port. In **Australia** the immigration of Chinamen is checked by a poll tax. In **Queensland** and **Fiji** the plantations are worked not by Coolies, but by imported **Polynesian labourers**; and the traffic in them—technically known as "**the blackbird trade**"—has had its chief abuse checked by strong protective legislation.

Coope, Mr. Octavius Edward, M.P., was b. at **Leyspring, Essex**. Married (1848) to **Emily Mary**, only daughter of Captain **R. Fulcher**, Indian army. Connected with the firm of **Coope and Co., brewers**. Deputy Lieutenant and **J.P.** for **Essex**, and **Hon. Col. Essex Rifle Volunteers**. Returned in the Conservative interest as member for **Great Yarmouth** (1847-48); **Middlesex** (1874-85); re-elected 1885.

Co-operation. Our whole civilisation has been a lesson in co-operation. The Indians of America have remained savages simply because they have not learned how to co-operate. Co-operation is a hard lesson for man to learn, and therefore our race had to commence with **compulsory co-operation**—with slavery. As our race progressed the compulsion became little by little milder, till we reached, first, serfdom, and, in our age, the wage-system. For our vast production is carried on co-operatively. There is no doubt that by-and-by all social activities will be carried on by co-operation—by **voluntary co-operation**. Great Britain has in our days taken two grand steps in that direction: by its system of co-operative stores, and its experiments in co-operative agriculture. More than forty years ago some noble men—some of whom, like **Lloyd Jones** and **Thomas Hughes**, are still living—started the first movement, that of co-operative distribution. In their generous zeal they put before themselves a grand aim: nothing less than that of re-organising society. They hoped they should be able to overturn the wage-system, by first inducing the labouring masses to unite in dispensing with the middlemen, and next, from the savings thereby realised, to obtain capital enough to start **productive enterprises**, so that

the working men could become their own masters, and independent of their capitalistic employers. It was a grand scheme, but unfortunately, as to its principal part, it has so far failed. The first part of it has been a glorious success. That is to say, there is now in Great Britain, but especially in the north of England, about 1,300 societies, that furnish their 700,000 members with nearly every commodity they use; their sales amount to the enormous sum of about £30,000,000 a year, and they have a wholesale store, the annual sale of which is about £5,000,000. This distributive co-operation has thereby undoubtedly accomplished great things. This great number of workers, who are nearly all heads of families, and therefore represent about 3,000,000 of persons, not only get their commodities of good quality and weight, but an immense sum is yearly saved, and prudence, forethought, and thrift, are fostered in them. It is also to the credit of these societies that they have contributed largely to the education of the people. Their organ is the *Co-operative News*, a weekly, published in Manchester, with nearly 30,000 subscribers. But the ambitious idea of making of this form of co-operation a lever wherewith to re-organise society has come to nought. Of productive enterprises—the essential part of the scheme—there have been but few, and comparatively unimportant ones. Experience has shown that of the 700,000 members the greater part have only become co-operators to save some shillings in the pound. Instead of using their dividends to start productive co-operation with, they prefer drawing them out as they become due, to spend on their personal comforts, or to invest them in joint-stock companies, and thus become small capitalists themselves. Nevertheless, these societies cannot, even unwittingly and unwillingly, help having considerable social effects; they contribute to making distribution in *wholesale* the only possible mode of distribution of the future, and pave the way for the evolution of social co-operation. Some of the London societies have lately started a noble form of co-operative enterprise. There are a great many poor young boys and girls employed at very small wages in the east of London in making up penny packages of various things of everyday household consumption. These societies are now trying to unite these young persons into a co-operative society, whereby they themselves may share in the profits of their work, and at the same time have their social and intellectual wants satisfied. There have been many attempts made in the United States to start this form of co-operation, but they have generally failed. The most considerable of these was the so-called *Granges*—co-operative distributive societies of farmers. They were successful for quite a number of years. The other form of co-operation here in England is that of co-operative farming—association farming. It consists in landlords renting land to bodies of agricultural labourers, who cultivate the land in common and divide the profits. Of these the *Radbourne Manor* and the *Assington Associations* are the most important so far. These experiments may prove of immense consequence to the agriculture of Great Britain. Especially should Mr. Chamberlain's proposal of municipalising the land ever be enacted by parliament, they may lead to the land, thus municipalised,

being turned over to bodies of agricultural labourers and the poor of cities, for the purpose of being by them likewise co-operatively cultivated.

Co-operative (Apartment) Homes—that is, single buildings, so large and conveniently constructed as to afford accommodation for several families, even for many, and more particularly containing only one kitchen, one laundry, etc., which do duty for all the residents—have been a conception dear to many social reformers, and will undoubtedly play a great rôle in the near future, when social co-operation takes the place of competition in industry and agriculture. The idea has hitherto been far more popular in France than either in Great Britain or North America, mainly because Anglo-Saxons have a tenacious liking for the privacy of home, and they fancy that such privacy is impossible when many families live together in one building. This is, however, in one important respect, a mistake. In a co-operative home the various families might order whatever they liked from the common kitchen, and have it taken to their own apartments: a common kitchen does not at all imply a common table. And what immense benefits would not such a community-home afford, especially, to the female part of mankind, by relieving the women of the drudgery of housekeeping! However, on account of this prejudice, nearly all co-operative efforts in Great Britain in regard to homes have hitherto been directed towards enabling individuals to occupy small private cottages, by forming co-operative building societies. The sum advanced by ninety-six such societies for cottage building purposes amounted in 1884 to £685,006. Something has, however, been done here and there in the way of establishing true co-operative houses; for the system of *flats*, in which each story is occupied by a family, while one kitchen and one laundry are common to all, is becoming very popular in New York city, and is being introduced in London. These “flats,” though, are intended for the rich, while it is the immense mass of toiling women of the working-classes who especially need to be relieved from the worry of washing and cooking. The miserable tenement-houses, so plentiful in our large cities, of course, possess nothing of the co-operative feature. The man who has done the most in the way of planning community-homes is the Frenchman Fourier. He conceives that mankind ought to live in huge social palaces, each containing four hundred families of different tastes, character, rank and fortune, to which he gives the name of *phalansteries*. In such a phalanstery there is a great open court in front, with two wings on the right and left. In the centre of the façade is erected a tower, where would be placed the telegraph, observatory and clock. Internally the rooms appropriated to public objects, such as meetings, occupy the centre. In the wings and back part of the edifice are distributed chambers, differing in size and furnishing, so that rich and poor can both suit themselves. A covered passage runs round the whole edifice on the first floor, capable of being warmed in winter and aired in summer. The food, prepared in the one vast and handsome kitchen, is furnished at cost price, and varies according to the taste and purse of the various families. That is about the plan on which is built the *Palais Royal* in Paris, in

which eight or nine hundred families dwell as separately as if under different roofs; so Fourier's idea is really not so utopian as it looks. Moreover, several attempts have been made by employers of labour to house their workpeople according to Fourier's model; the only successful of which, however, is the celebrated **Familistère** (*q.v.*) of Mr. Godin, at Guise, France. In the "forties" a wave of Fourierism passed over the United States, resulting in the building of several phalansteries; but they all failed. The best known of them, the phalanstery of the **Brook Farm**, near Boston, 175 feet long and three stories high, was burnt down before it was occupied.

Co-operative Trading. According to the last annual report of the Registrar-General of **Friendly Societies**, published in December 1885, co-operative trading shows signs of healthy development. The number of co-operative societies who sent in returns in 1884 was 921, including 51 land and building co-operative societies. The 807 co-operative trading societies had a total membership of 576,477, and the 51 land and building societies 4,907; the two totals showing an increase over the joint return for the year previous of 65,479. The sale of goods by the trading societies was £23,583,503, showing an increase on the previous return of £3,626,228. The stock-in-trade was £2,727,146, an increase of £379,539; the trade charges were £1,516,800, an increase of £302,469; the share capital was £6,871,590, an increase of £929,873; the loan capital £1,165,956, an increase of £22,750; and the profits amounted to £4,928,563, an increase of £595,050. The statement of losses returned, the total of which was £2,075, showed a decrease of £14,865. The following table gives the statistics of the amount of business done by the principal co-operative societies:—

	Sales.	Increase.	Decrease.
Co-operative Wholesale	£ 4,540,928	£ 518,956	£ —
Civil Service Supply Association	1,674,400	70,350	—
Sowerby Bridge United District Flour	500,357	—	94,307
Leeds Industrial Co-operative	486,065	48,487	—
Oldham Industrial Co-operative	335,673	15,337	—
Great and Little Bolton Equitable and Industrial Co-operative	295,457	41,043	—
Rochdale Equitable Pioneers	276,457	1,830	—
Rochdale District Co-operative Corn Mill	259,397	—	27,569
Manchester and Salford Equitable Co-operative	259,060	4,936	—
Barnsley British Co-operative	253,512	38,091	—

Co-operative Congress. The seventeenth annual congress of the Co-operative Societies of Great Britain was held on March 4th, 5th,

and 6th, 1885, in Oldham, and was presided over by the veteran co-operator, LLOYD JONES. 550 delegates attended. The most important part of the business was the reception and discussion of the report of a committee, appointed in 1884, to collect evidence and submit the best method of starting productive establishments with a view of employing surplus capital. The committee reported "that the time is not ripe," and that "the societies are not in the right mood" for the experiment. After hearing this report, delegate after delegate from important centres rose to protest. "If the time is not ripe now it never will be." It seemed to be the prevailing opinion that the societies were willing to take the steps in advance; and with that in view, a new committee was appointed to report proper method for the next congress.

Coopering at Sea. Coopering is a species of trade carried on with mariners (principally fishermen) while at sea. The articles offered for sale on those "floating grog shops," as the coopers' vessels are termed in nautical phraseology, are inferior tobacco and different kinds of spirits. Coopers ply their trade on all parts round the coast of the United Kingdom where fishermen congregate; but are to be found in their largest numbers in the North Sea. Their goods are eagerly purchased by fishermen and others, being cheaper than when purchased on shore—as they are exempt from the usual heavy duty. Many irregularities take place in the large fleets of fishing boats, through the facilities for obtaining coopers' spirits. In consequence of recent inquiries by the Board of Trade in connection with charges against masters of smacks, who it was alleged, were unfit to attend to the navigation of their vessels by reason of indulging excessively in the spirits supplied by the coopers—the attention of the Legislature has been called to the nuisance. The customs authorities, besides, have shown, by numerous convictions for smuggling, that the cheapness of the articles sold by the coopers incites the fishermen to a large indulgence in contraband trade.

Cooper's Bill. See FORESTRY.
Coopers, Worshipful Company of. See CITY GUILDS, THE.

Coote, Mr. Thomas, jun., M.P. of Ambury House, Huntingdon, the son of Mr. Thomas Coote, J.P., of Oaklands, St. Ives, Hunts, and Lisle House, Bournemouth. Was a partner in the firm of Coote and Warren, of St. Ives, from which he has recently retired. Returned in the Liberal interest as member for South Huntingdonshire (1885).

Coptic. See MINING, and TRADE OF 1885.
Coptic Church. The **Copts** are by race the descendants of the ancient Egyptians. They trace their Christianity to the preaching of St. Mark; but the Coptic Church as distinct from the Alexandrian Church dates from the Council of Chalcedon, in 451 A.D. That Council deposed and banished **Dioskoros**, Archbishop of Alexandria, for heresy; but Dioskoros, beloved and trusted, carried away with him the great majority of the people. The division thence arising in the Church of Egypt has lasted to this day, the Coptic Church and the orthodox or **Melkite Church** each retaining its own succession of Patriarchs; but the latter has only a small following of Greeks or other aliens, not native Egyptians. The Melkite or Royalist Church agrees with the Greek Church in doc-

rine, while the Copts are **monophysites**—i.e., they deny that our Lord had two natures after the incarnation—deny, in fact, His humanity. At present, however, *μία φύσις* has lost its force even as a sectarian watchword; few of the Copts know the meaning of monophysitism, and political obstacles alone prevented the union of the Coptic and Melkite Churches a few years ago. The Copts recognise **seven sacraments**; use trine immersion, and join confirmation with baptism; give both kinds to the laity; deny purgatory and masses for the dead; allow pictures, but not statues, in their churches and houses. Each Church has three altars of stone, and generally the architectural arrangements of the Coptic sacred buildings, as well as their rites and ceremonies, are unrivalled in point of antiquity and interest.

Coptic, The. See EGYPTOLOGY.

Copts. See COPTIC CHURCH.

Copyhold. The lord of a manor was in feudal law the landlord of the whole manor; but over different parts of it his rights were different. Part was cultivated by his free tenants, whose interests were carved out of and limited his interest in that part of the land. Another part was waste, and over this he had discretion limited only by their right to use it for purposes of pasturing cattle, cutting turf, &c. A third part was his own demesne, which he cultivated with the help of his villeins, who did not own the soil, but were attached to it, and could be sold with it. By degrees the villeins acquired both personal freedom and rights in the soil, and became the first copyholders, holders by copy of Court Roll—all transactions affecting this part of the manor being kept on record in its Court. The copyholder has as good a title as a freeholder, and the various estates in copyhold are analogous to those in freehold. But the lord of the manor still has substantial rights over copyhold land. He has a right to all minerals beneath the surface, and to all trees growing on it. He is entitled to a considerable fine every time the copyhold changes hands, and sometimes upon the death of a tenant to a heriot (the tenant's best beast or chattel). Sometimes he receives a small rent; indeed, his rights vary in different manors according to custom, which regulates the tenure of copyhold. Hence copyhold land is sometimes said to be held by customary tenure. The incidents of copyhold tenure being various and oppressive, enfranchisement has been made compulsory on both lord and tenant, whenever either desires it. The rights of the lord are commuted for either a lump sum or a rent-charge, or an estate in fee simple in part of the land; and thereupon the copyhold becomes freehold. In cases of compulsory enfranchisement application is made to the Land Commissioners; but where the lord and tenant both agree to enfranchise, a simple conveyance of the fee simple from the lord to the tenant is sufficient. Both modes of enfranchisement have been largely employed, and a great extent of copyhold has become freehold. A bill to make enfranchisement in certain events compulsory on both landlord and tenant has twice been introduced into parliament, but has not yet become law.

Copyright, English. The first English Copyright Act, passed in the reign of Queen Anne, gave the author an absolute right of fourteen years, with an additional fourteen years in case of the author or his representative

surviving this term. By an Act of George III. the period was increased to twenty-eight years, and the remainder of the author's life, if any. The Act at present in force (5 and 6 Vict., c. 45) fixes copyright at forty-two years, or the period of the author's life, with a grace of seven years, whichever is the longer. Copyright covers literary, dramatic, artistic, and musical property. The Act provides that the owner of a copyright shall present one copy of the article protected, if published, to the Library of the British Museum, and one copy each, if demanded, to the Bodleian Library, Oxford, the University Library, Cambridge, the Advocate's Library, Edinburgh, and the Library of Trinity College, Dublin.

Copyright, International. The question of an International Copyright Treaty between England and America has been much discussed and agitated about during the past few years, on both sides of the Atlantic. The Americans, as a nation, seem to have only one object in view—the production of cheap literature, regardless of its source. The more important American publishers, however, who until quite recently were themselves the greatest of literary pirates, and amongst whom there was a kind of etiquette that gave the first reprinter of a foreign book the sole market for it, are now clamouring for an **International Treaty**; and not too soon, since their own home trade in reprinted books is being "infringed" by their newer and less scrupulous colleagues, who do not hesitate to reproduce and undersell an existing American edition of a work that has already been "taken up" by one of their rivals. The larger houses are thus brought to urge an arrangement which would restore to them a lost monopoly, even if they had to buy it at a fair price. The *quondam* reply that England is free to use American writers in the same degree that America is to use English is seldom heard now, not because the truth is admitted—viz., that America has no native literature to be compared with that of England—but because the Englishman's "rights" have become clear (to the American publisher), and because American native literature is being stifled out of the market* for lack of encouragement, since American publishers will not buy what they can get better for nothing. Many suggestions have been made, but nothing has been done. The American publishers' latest proposal is that a treaty should be formed, but that it should include a "manufacturing clause," giving a bonus to home-produced books; thus eliminating English competition in its own products,—which, moreover, are subject, under present American tariff, to an import duty of 25 per cent. It is not, however, at all likely that England would sign such a treaty, nor do the American authors as a body propose it—Mr. W. M. Griswold writing to the (*American Publishers' Weekly*) that he "should prefer that the reform should be postponed for a generation rather than that a 'manufacturing clause' should be embodied in it." For our part, we do not think that English authors and publishers have

* The bookstalls and bookshops from New York to Niagara, and thousands of miles further, are nine-tenths filled with reprints of English books. It is possible that during the present session of Congress a law will be enacted giving English authors a copyright in the United States (see *Times*, Jan. 30th, 1886).

much to hope for in the way of justice, for at any rate some time to come. So long as America remains Protectionist in policy, and so long as she can get from us what we cannot get from her, she will retain the *status quo*. The only and far distant hope is that American writers will, in spite of the enormous handicap upon them, gradually develop a literature of their own which shall be pecuniarily worth their while to protect abroad. **Mr. E. P. Roe** writes: "While on a recent lecture trip in Canada, I found my books as thick as blackberries; in the trains my own books—stolen—were offered for my purchase. I had the feeling that before I got back to the States I might have to buy my own valise and overcoat."

Coral Reefs are masses of limestone formed mainly of the hard parts of corals, mixed with shells, etc. The outer edge contains live coral, but the polypes cannot live above low water, and hence the higher parts of the reef consist of dead coral, broken off by the breakers and piled up above sea-level. Three types of reef are recognised. (1) **Fringing reefs**, or simple belts of limestone surrounding an island or skirting a continent. (2) **Barrier reefs**, which are separated from the land by a channel of water. (3) **Coral islands**, enclosing lagoons, and forming irregular rings interrupted at several points, so as to form a series of islets, known as **atolls** (a Maldivian word). The water on the seaward margin of a reef is in many cases very deep, yet the reef-forming corals are confined to shallow water. Hence **Darwin** (*g.v.*) suggested that in such cases the coral land must have been depressed. If an island girt by a fringing reef suffered depression while the polypes continued to grow upwards, the island must become smaller and smaller; and as the growth of coral is most luxuriant at the outer edge, where bathed by the surf, a channel will appear between the land and the reef. The fringing reef thus becomes a barrier. By further subsidence the last peak of the island disappears, and an **annular atoll** is formed. Hence Darwin's acute generalisation that barriers and atolls indicate subsiding areas. Doubt has of late years been cast upon these views by Louis and Alexander Agassiz, Semper, Rein, and J. Murray, of the *Challenger*. The best exposition of the objections is in **Dr. A. Geikie's** address to the Royal Physical Society of Edinburgh, published in 1884. Cases of elevation are cited where the subsidence theory required depression. It is held that the coral growth is based on volcanic rocks, either reduced to the proper level by erosion, or raised to it by deposition of organic detritus. **Professor Dana**, a high authority on corals, has replied to these objections in the "American Journal of Science," and in the "Philosophical Magazine," 1885. He considers the subsidence theory remains unshaken.

Corbet, Mr. William Joseph, M.P., was b. 1825. He is a member of the Royal Irish Academy. Returned as a Nationalist for Co. Wicklow (1880-85); East Wicklow (1885).

Corbett, Mr. A. Cameron, M.P., of Glasgow, was b. 1857. Returned as Liberal member for Glasgow, Tradeston Division (1885).

Corbett, Mr. John, M.P., was b. 1817. He is proprietor of the Stoke Prior Salt Works, Worcestershire, and Director of the Gloucester and Sharpness Docks, and Gloucester and Berkeley Canal. Deputy Lieutenant for Merionethshire and J.P. for Worcestershire and Merioneth-

shire. Returned as an Independent for Droitwich (1874-85); Mid Worcestershire (1885).

Cordilleras. See PANAMA CANAL.
Cordwainers, The Worshipful Company of. See CITY GUILDS, THE.

Corea. A peninsula lying between the Yellow Sea and the Sea of Japan, with an area of 80,000 sq. miles. Very little is known of the interior, either as to the people or the nature of the soil; but rice, millet, cotton, hemp, tobacco, and many kinds of fruits are grown on the fertile territory skirting the sea, and the people are similar in their habits and customs to the Chinese on the neighbouring mainland. In the spring of 1885 the place had a special interest for Englishmen, owing to the rumoured intention of Russia to seize Port Hamilton (*g.v.*), in the Island of Quelpart, south of Corea. The Russian Government, while denying the truth of the rumour, allowed the St. Petersburg press to declare, without contradiction, that England intended to seize the island and convert it into a fortress, which would block the Korean Sea against Russian cruisers. Both stories were *canards*, but there can be little doubt that in the event of a war between England and Russia, Port Hamilton would be seized by one or the other of these Powers—probably by England, as having an unquestioned naval supremacy in the Chinese seas. The result would be that the Russian naval fortress, **Vladivostok**, would be practically blockaded from the south. The treaty of commerce between Russia and Corea, which was ratified last year, was published Mar. 10th, 1886, by which Russia obtains such rights with especial regard to exports and imports as have been or may be granted by Corea to other Powers. A Russian-Chinese commission is (March 27th, 1885), engaged upon the delimitation of the frontier.

Corinth Ship Canal. See ENGINEERING.
Cork and Orrery, Richard Edmund St. Lawrence Boyle, P.C., 9th Earl (creat. 1620); Baron Boyle of Marston (1711), by which title he sits in the House of Lords; b. 1829; succeeded his father 1866. M.P. for Frome (1854-56). Master of the Horse (Feb. 1886).

"Cornwall, Barry." See NOMS DE PLUME.
Coronation. A ceremony, now a mere form, which in early times had a distinct significance. The earliest record of a coronation occurs in the "Anglo-Saxon Chronicle," when Egfrith was made king, A.D. 785. The several rites and the form of royal oath have undergone repeated alterations; but the present ceremony is nearly the same as that fixed at the Revolution of 1688. The oath binds the Sovereign to abjure the doctrine of Transubstantiation, to rule according to the Parliamentary Statutes, with "justice in mercy," and to "maintain the Protestant Reformed Religion established by law."

Coronins, Count. See AUSTRIAN POLITICAL PARTIES.

Corpulence. See BANTING.

Corrupt and Illegal Practices Prevention Act, 1883. This Act came into force on the 15th October, 1883, and has been annually renewed from the 31st December, 1884. It is directed to secure the purity and reduce the expense of parliamentary elections, and partially consolidates previous legislation on the same subject. It renders persons convicted of treating, bribery, personation and undue influence, liable to imprisonment with hard

labour. It renders a candidate who has been personally guilty of corrupt practices incapable of ever sitting again for the same constituency, and incapable for seven years of sitting in the House of Commons. It renders all persons guilty of such practices incapable for seven years of holding any public office or exercising any franchise. A guilty magistrate is to be reported to the Lord Chancellor, a guilty barrister to his Inn, and generally in the case of other professions a culprit is to be reported to its controlling authority to be dealt with as for misconduct in his profession. So licensed victuallers are to be reported to the licensing justices, who may refuse to renew their licences. A corrupt person or constituency may be ordered to pay the whole or part of the costs of the petition. The Director of Public Prosecutions or his representative is to appear at the trial of every election petition, and to take directions from the Court respecting the prosecution of offenders. Stringent formalities are imposed upon persons desirous of withdrawing an election petition, and a corrupt agreement to withdraw is declared to be a misdemeanour. Even where no petition has been presented, the Director of Public Prosecutions is bound on receiving information of corrupt practices to make such inquiries and institute such prosecutions as circumstances seem to him to require. The number of paid assistants and committee rooms is strictly limited. No conveyances are to be hired. A variety of unnecessary payments are declared illegal. A limit varying with the extent of the constituency is imposed on the expenditure of the candidate. The breach of any one of these among other provisions constitutes an "illegal" as distinct from a "corrupt" practice. Illegal payment, employment, hiring, etc., if committed personally by candidate or agent, amount to illegal practices. Persons convicted of such practices are liable to be punished by fine and incapacity. All claims must be paid through one election agent, who must make a return of the election expenses within a limited time. A violation of these rules amounts to a corrupt practice, and vacates the seat. Provision is made that persons shall not be subjected to any of the penalties provided in this Act merely through accident, inadvertence, or the fault of another. (See *Hobhouse*, "Parliamentary Elections Act.")

Corry, Sir James Porter, M.P., of Dunraven, Belfast, co. Antrim; was b. at Newtownards, co. Down, 1826. Is J.P. for co. Antrim and Belfast, and a merchant and shipowner. Sir J. P. Corry entered Parliament in the Conservative interest, representing Belfast (1874-85); Mid Armagh (1886).

Cortes. See SPAIN.

Corvinus, Matthias, Library of. See AUSTRO-HUNGARY.

Cossham, Mr. Handel, M.P., F.G.S., was b. at Thornbury, near Bristol, 1824. Is an extensive colliery proprietor in the neighbourhood of Kingswood; Mayor of Bath (1885). Returned in the Liberal interest as member for East Bristol (1885).

Costa, Sir Michael. A famous conductor, b. at Naples 1810. His family was of Spanish descent. As a young man he worked hard at musical composition, but he came as tenor singer to the Birmingham Festival in 1829. He was engaged as conductor at the London opera, which he brought to a perfection before un-

known. He wrote many fairly successful operas. From 1846 to 1854 he was conductor of the Philharmonic Society, and conducted the Sacred Harmonic Society (1846), the Birmingham Festival (1849), and the Handel Festival (1857), posts which he practically continued to his death. In 1846 he left Her Majesty's Theatre for Covent Garden Opera, returning to the former 1871. He wrote his fine oratorio "Eli" (1855), and "Naaman" (1864), both excellent and highly popular works. He was knighted in 1869. Died 1883.

Costrick, Mr. Joseph. See TRADES UNION. **Cottage Arts Association**. See HOME ARTS ASSOCIATION.

Cottenham, Kenelm Charles Edward Pepys, 4th Earl of (creat. 1850); b. 1874, and succeeded his father 1881. The 1st peer was Lord Chancellor.

Cottesloe, Thomas Francis Fremantle, P.C., 1st Baron (creat. 1874); was b. 1798. Educated at Oriel Coll., Oxford, where he was 1st class in mathematics and 2nd class in classics (1819). Secretary to the Treasury (Dec. 1834 till April 1835, and Sept. 1841 till May 1844); Secretary at War (May 1844 to Feb. 1845); Chief Secretary to the Lord Lieutenant of Ireland (Feb. 1845 to Jan. 1846, when he was appointed Deputy Chairman of the Board of Customs; subsequently became Chairman; and resigned (Dec. 1873). Was M.P. for Buckingham (1826 to Jan. 1846). This peer's father was a naval officer, particularly distinguished at Copenhagen and Trafalgar.

Cotton, Captain, E. T. D., M.P., R.A., only son of the late Bishop Cotton, of Calcutta, was b. 1847, and educated at Rugby, Marlborough, and the Royal Military Academy, Woolwich. Retired from the service 1881. He is a J.P. for Cheshire. Elected in the Conservative interest as member for Cheshire, Wirral Division (1885).

Cotton, James Sutherland, b. in India 1847, the son of J. J. Cotton, H.E.I.C.S., educated at Winchester School, and at Trinity College, Oxford; first class in moderations and in the final schools; Fellow of Queen's College. Called to the bar at Lincoln's Inn 1874, and went the Western Circuit. Has undertaken much literary work in connection with India; assisted W. W. Hunter in compiling the "Imperial Gazetteer of India," and in revising the second edition; wrote "India" in Macmillan's "Citizen Series"; prepared for the Government a report upon the administration of India for the ten years 1873-74 to 1882-83—a blue book of nearly four hundred pages. Editor of the *Academy* since 1880.

"**Cotton, R. J.**" See NOMS DE PLUME.

Cotton Trade. The. For upwards of a century the cotton manufacture has occupied a prominent place in the front rank of British industries, and no other branch of business has made the name of the country so widely known, or done so much to create its character for commercial enterprise. It is recorded that six centuries ago cotton-wool was used in England in the shape of candle-wicks, but we find no mention of the material being converted into cloth until the year 1641, when Manchester appears to have developed a small trade in the production and sale of fustians and dimities. Half a century later the first mention of cotton wool as an article of import occurs in the Customs books. The quantity taken in the year 1697 was close upon two million pounds

weight, and the value of cotton goods exported was £5915. In no succeeding year up till 1746 does such a large quantity of cotton-wool seem to have been imported, and for a considerable period after that year progress was made at a very slow rate. Coming to 1781, we find the import set down at a little over five million pounds weight; but soon afterwards the figures rose rapidly, and there was a steady advance from 3½ million pounds in 1790 to 13¼ million pounds in 1810, to 695 million pounds in 1850, and so on. The cotton manufacture owes its marvellous development to a variety of mechanical contrivances the history of which forms one of the most interesting chapters in the records of inventions. The chief of the early honours in machine spinning

belong to Hargreaves, the inventor of the spinning-jenny; to Arkwright, the inventor of the spinning-frame; and to Crompton, who in 1779 combined the action of both machines in the mule jenny. Many improvements have since been effected in the details of the mule jenny; but the principle of action remains unchanged. The invention of the "fly shuttle" and of the power-loom mark distinct periods in the history of the cotton manufacture, and these appliances have been followed by many others, until now the machinery employed in the trade ranks among the most wonderful of existence, and all of it may be said to be the creation of English inventors. The following table contains some interesting figures relating to the trade:—

	1885.	1874.	1868.	1862.	1856.
Number of Factories	2,635	2,655	2,545	2,887	2,210
Spinning Spindles	40,120,451	37,515,772	32,000,014	30,387,467	28,010,217
Doubling Spindles	4,228,470	4,366,017	2,215,231	—	—
Power Looms	560,955	463,118	379,329	399,992	298,847
Children employed—					
Males	23,904	33,672	22,244	22,081	14,363
Females	26,088	33,228	19,430	17,707	10,285
Males under 18	40,205	38,557	34,324	41,207	38,941
Females above 13	281,603	258,667	220,605	251,303	211,742
Males above 18	132,269	115,391	104,461	119,268	103,882
Persons employed—					
Males	196,378	187,620	161,029	182,556	157,186
Females	307,691	291,895	240,036	266,013	222,027
Total	504,069	479,515	401,064	451,569	379,213

The distribution of the cotton trade throughout the three divisions of the kingdom in 1865 and 1885 is shown below:—

	1885.				1865.			
	No. of factories.	No. of spindles.	No. of power looms.	No. of persons empl'd.	No. of factories.	No. of spindles.	No. of power looms.	No. of persons empl'd.
England and Wales	2,481	43,128,491	528,765	465,654	2,046	25,818,576	275,590	341,170
Scotland	147	1,149,514	29,689	37,167	152	2,041,139	21,624	34,698
Ireland	7	70,916	2,501	1,248	12	150,502	1,633	3,345
Total	2,635	44,348,921	560,955	504,069	2,210	28,010,217	298,847	379,213

The English manufacturers receive their supplies of cotton-wool chiefly from the United States, but India, Egypt, and Brazil are also drawn upon for a considerable quantity. The value of the wool is determined by the length of the fibres, and in this respect the variety known as Sea Island cotton holds the first place. It is grown in some of the southern States, where salt clay mud is available for manure. The annexed table shows the imports and exports of raw cotton during the last ten years. It will be noted that 1885 compares unfavourably with eight of the ten years.

Year.	Total Import of all kinds into Great Britain.	Total Export of all kinds from Great Britain.
	Bales.	Bales.
1885	3,205,010	473,820
1884	4,154,700	634,120
1883	4,034,690	594,570
1882	4,234,860	670,940
1881	3,837,030	537,580
1880	3,639,790	531,190
1879	3,359,230	484,320
1878	3,015,840	363,710
1877	3,198,090	437,420
1876	3,583,480	523,590

The average weight of a bale is 428 lb., so that last year's imports reached close upon 1372 million pounds weight. A strike in the Oldham district which lasted from July 17th to October 17th accounts for the falling off in the consumption of cotton in the factories. The strike affected directly 30,000 operatives, and 7,000,000 spindles and 55,000 looms were stopped. The cotton manufacture generally has not been in a prosperous condition for some years past, owing partly to the prevailing depression of trade and partly to the fact that the United States and several Continental countries are engaging more largely than formerly in the business, and so restricting the markets which the English manufacturers have so long served. In India, too, many cotton mills have been established in recent years, and these are affecting our markets in that country, and also in China and Japan. Calico printing and lace making are branches of the cotton manufacture which have received great attention in England, and have reached a high degree of development. During the year 1885 England exported 4,374,478,800 yards of cotton piece goods, of which 1,224,160,300 yards were dyed or printed. Of stockings 1,731,607 dozen pairs were exported, of yarn 245,732,900 lb.; and of thread for sewing 15,059,000 lb. The value of the piece goods exported was £48,273,926; of the hosiery, lace, etc., £3,274,915; of the yarn, £11,859,113; and of the thread, £2,366,146; the total value of all kinds exported being £55,112,931. A recent writer on the cotton trade has made some ingenious calculations with a view to showing what an extensive business it is. He states that the bales of cotton imported each year would, if placed end to end, form a rampart along the entire coast-line of Great Britain; that the yarn produced in the same time would measure no less than 26,515,840,909 miles; that if we should use the earth as a bobbin on which to wind this marvellous thread, we should be able to encircle it considerably over a million times; that the cotton cloth of all kinds woven annually would make a continuous web one yard wide and 2,445,171 miles in length, sufficient to cover an area of 884,600 acres; and that the power-looms used in the production of this mighty web would, if placed side by side, with the smallest allowance of working space, extend from Brighton to John o'Groat's.

Council of Chalcedon. See COPTIC CHURCH.
Countess of Huntingdon's Connexion. *The*, owes its existence to the religious revivals in the eighteenth century, with which Whitfield and the Wesleys are so prominently identified. The Countess of Huntingdon (d. 1791) having, when young, received strong religious impressions, entered into the movement with great enthusiasm and determination, opened her drawing-room for the preaching of the gospel, and thereby drew many of the nobility into association with the great revival movement. She also engaged large buildings or theatres, and converted them into preaching stations, her chaplains, George Whitfield, and other clergymen and ministers, officiating therein. She also established a college in Wales, about the year 1768, which was a few years afterwards removed to Cheshunt, from which many hundreds of pious young men have been sent to different denominations. The Countess of Huntingdon was by preference a Churchwoman; but from the ecclesiastical law, to which she would not submit when

it interfered with her desire to have the preaching of the gospel in her private chapel she sheltered herself under the Toleration Act, and declared herself a Dissenter, though she uniformly used the Liturgy of the Church of England in nearly all her chapels; its use has generally been continued in her principal chapels till the present day. The Connexion has never been numerically strong, inasmuch as its soundness was not sufficiently careful to perfect an organisation in time. While she lived, she maintained entire and absolute control. Her devisers were unable to exercise a similar control; and although a trust was created a few years after her death, many of the buildings which were her property, being leasehold, lapsed into other hands. At one time the preaching stations numbered over a hundred; at the present time the principal congregations number a few over thirty, with perhaps an equal number of mission stations. The buildings themselves are better than they have ever been, being freehold and many of them handsome structures, having been entirely rebuilt; others have been extensively renovated. New buildings for college have also been added, at a cost of over £10,000. It is estimated, according to recent evidence given before a committee of the House of Commons, that the value of the college and Connexion property exceeds £220,000. For many years all the business of the body was transacted at Spa Fields Chapel, Clerkenwell—then in the fields—at which the Countess lived and died. More recently the affairs have been conducted mainly by members of the Congregational body, who by some means obtained almost exclusive preponderance in the trust. However, recent appointments seem to indicate a more just consideration of the rights and wishes of the component parts of the Connexion; and the elegant new church, in place of the Spa Fields chapel just referred to, now in course of erection in Lloyd Square, in prominent association with the college, justifies the expectation of many that with its large resources the body may again become important. All the ministers who officiate are bound to subscribe to fifteen doctrinal articles, as a confession of faith and as a bond of union. The students also, on their admission to the college, are under similar obligation.

County Courts. History.—The modern County Court, which must be carefully distinguished from the County Court of early English history, dates from the year 1846. Under the Act 9 & 10 Vict., c. 95, and subsequent Acts, a certain number of county court districts have been marked out in each county. The court for that county is held at short intervals in one or more places within each of these districts. Several districts are grouped in one circuit, and a judge is allotted to each circuit. The judge is appointed by the Lord Chancellor, and must be a barrister of at least seven years' standing. He has the assistance of a registrar and other officers. **Jurisdiction.**—County Courts have jurisdiction in the following cases:—(a) In actions in which the sum claimed by the plaintiff does not exceed £50; (b) in actions relating to real property, the annual value or rent of which does not exceed £20 per annum. But from the above cases must, generally speaking, be excepted all actions in which the validity of any devise, bequest or limitation in a will or settlement is disputed,

and all actions for malicious prosecution, libel, slander, seduction, or breach of promise of marriage. But by consent in writing of both parties, any action whatever which could have been brought in the Queen's Bench Division may be brought in a County Court. And if the plaintiff in a superior court recover no more than £20 in an action for breach of contract or £10 in an action of tort, he can get no costs except by special favour of the court; and in an action for breach of contract in a superior court, if the claim be not for more than £50, either party may apply to have the action transferred to the County Court; (c) in actions such as may be brought in the Chancery Division of the High Court of Justice, provided that the property in dispute does not exceed £500 in value; (d) in Admiralty actions in which the claim is for salvage, for towage, necessities or wages, for damages to cargo, or by collision, or arises out of agreements concerning the use or hire of any ship, the care of goods therein, etc., and does not exceed certain specified limits of amount; (e) actions in bankruptcy; (f) a variety of actions too numerous to be severally mentioned here. **Procedure.**—A jury may be summoned when the amount claimed exceeds £5 at the requisition of either party, and in other cases at the discretion of the judge upon the application of either party. The jury consists of five persons qualified to serve as jurors in the High Court. The plaintiff begins by entering a plaint in a book kept by the registrar. The officer of the Court then serves a summons upon the defendant. Both parties must appear on the day named in the summons. Pleadings are not in use. Evidence is taken *vivâ voce*. Solicitors as well as barristers may address the Court. If the debt or damage claimed exceed £20, an appeal lies from the decision of the judge upon any question of law, or on the admission or rejection of evidence, unless the parties have previously agreed that such decision should be final.

Courbet. French Vice-Admiral, b. June 28th, 1827, at Abbeville. In 1847 he joined the Polytechnic School, and in 1852 became naval ensign. In 1873 he received the full rank of captain. He was next appointed Governor of New Caledonia, returning to France 1882. In 1883 he was selected, on the death of Rivière, as commander of the naval division of Tonquin. He attacked Hué, and took the forts of Thuan-an, and imposed a treaty on the court. General Bouet returned to France, and Admiral Courbet was appointed to succeed him; he established his head-quarters at Hanoi, and (December 16th, 1884) took Sontay. He afterwards proceeded up the Min, and destroyed the forts and defences of the Chinese, advancing and seizing Kelung, and also capturing the Pescadores Islands against an enemy very superior in numbers. He died at Makung, one of the Pescadores Islands, June 11th, 1885, and was buried at Paris.

Course of Exchange, The. See STOCK EXCHANGE OFFICIAL LIST.

Courts Baron and Leet. See MANOR.

Courtesy Titles. See TITLES OF COURTESY.

Courtney. Mr. Leonard H., M.P., was b. 1832. Graduated (1855) at St. John's College, Cambridge, as Second Wrangler, was bracketed first Smith's prizeman, and elected a Fellow of St. John's. He was called to the bar at Lincoln's Inn (1858). Professor of Political Economy at University

College, London (1872-75). Visited India (1875-76). Entered parliament as Liberal member for Liskeard (1876-85). Successively Under Secretary of State for the Home Department (1880), Under Secretary of State for the Colonies (1881-82), and Financial Secretary to the Treasury (1882-85). Elected in the Liberal interest as member for South-East Cornwall (1885).

Courtown, James George Henry Stopford, 5th Earl of (creat. 1762); Baron Saltisford, by which title he sits in the House of Lords; b. 1823, and succeeded his father 1858.

Couvrent, Mons. See PANAMA CANAL.

Coventry, George William Coventry, P.C., 9th Earl of (creat. 1697); b. 1838, and succeeded his grandfather 1843.

Coventry Silk Industry. See SILK MANUFACTURES.

Cowen, Mr. Joseph, M.P., son of the late Sir Joseph Cowen, was b. 1831. Educated at Edinburgh Univ. Coalowner and fire-brick manufacturer. He is proprietor of the *Newcastle Chronicle*. Returned in the Liberal interest as member for Newcastle-on-Tyne (1874-85); re-elected 1885.

Cowley, William Henry Wellesley, 2nd Earl (creat. 1857); b. 1834, and succeeded his father 1884. Formerly lieutenant-colonel; served in the Crimean campaign (1855), and in Oude campaign (1858); has the 5th class Medjidie. The 1st Baron Cowley was a distinguished diplomatist, and brother of the 1st Duke of Wellington.

Cowper, Francis Thomas de Grey Cowper, 7th Earl (creat. 1718), P.C., K.G. (1865); a Prince and Count of the Holy Roman Empire (1758); b. 1834, and succeeded his father 1856. Educated at Ch. Ch., Oxford, where he was 1st class in law and modern history (1855). The 1st peer (grand-uncle of Cowper the poet), was made Lord Keeper of the Great Seal (1705). Was one of the Commissioners for the Treaty of Union between Scotland and England; and Lord High Chancellor (1707).

Cox, Mr. Joseph Richard, M.P., was b. 1852. Educated at St. Mels Coll., Longford. Secretary to the Lord Mayor of Dublin during the last three Mayoralties. Returned as a Nationalist for East Lale (1885).

Coxwell, Mr. See BALLOONING.

Cosens-Hardy, Mr. Herbert Hardy, Q.C., M.P., of 50, Ladbroke Grove, London, W., and 7, New Square, Lincoln's Inn, was b. 1838. Educated at Univ. Coll., London (of which he is a Fellow), obtaining the University Law Scholarship (1862). Called to the bar at Lincoln's Inn (1862); Q.C. (1882). Returned in the Liberal interest as member for North Norfolk (1885).

Cranborne, Viscount, James Edward Hubert, M.P., the eldest son of the Marquis of Salisbury (to whom he is private secretary), was b. 1861. Educated at Univ. Coll., Oxford. Holds a commission in the Herts Yeomanry Cavalry (1881-86). Returned in the Conservative interest as member for Darwen Division, North-East Lancashire (1885).

Cranbrook, Gathorne Gathorne-Hardy, P.C., 1st Visct. (creat. 1878), 3rd son of John Hardy, Esq., who was M.P. for Bradford during ten years, by Isabel, d. of Richard Gathorne, Esq., of Kirby Lonsdale, was b. at Bradford 1814. Educated at Shrewsbury School, and at Oriel Coll., Oxford, where he was 2nd class in classics, and graduated B.A. (1836). Was

Under-Secretary for the Home Department (March 1858 to June 1859); President of the Poor Law Board (June 1866); Secretary of State for the Home Department (1867-68); Secretary for War (Feb. 1874 to April 1878); Secretary of State for India (1878 to May 1880); President of the Council (June 1885 to Jan. 1886). M.P. for Oxford University (July 1865 to May 1878); stood for Bradford unsuccessfully (July 1847); was member for Leominster from Feb. 1856 till he was elected for Oxford.

Craufurd Plate. See RACING.

Craven, Mr. Joseph, M.P., was b. 1825. Engaged in business as a manufacturer (1847-75). Is a Governor of the Crossley Orphanage. Returned in the Liberal interest as member for North Shipley Division, West Riding (1885).

Craven Stakes. See RACING.

Craven, William George Robert Craven, 4th Earl of (creat. 1801); was b. 1868, and succeeded his father 1883. The 1st peer was a distinguished military commander.

Crawford, Mr. Donald, M.A. (Oxon.), M.P., was b. 1837. Educated at Glasgow Univ. and Balliol Coll., Oxford, where he graduated. Elected a Fellow of Lincoln Coll., Oxford (1861). Called to the Scottish bar (1862). Legal Secretary to the Lord Advocate of Scotland (1880-85). Returned in the Liberal interest as member for North-East Lanarkshire (1885).

Crawford, James Ludovic Lindsay, 26th Earl of (creat. 1398); Earl of Balcarres (1651); Baron Wigan (1826), by which title he sits in the House of Lords; was b. 1847, and succeeded his father 1880. Was M.P. for Wigan (1874-80). Author of several astronomical works.

Crawford, Mr. William, M.P., was b. 1833, and worked at an early age in the coal mines of Hartley. He took an active part in opposing the mine owners of Northumberland in their attempt to introduce the system of yearly hirings. Became (1863) secretary of the Durham Miners' Association, which numbers some 35,000 members—an office which he still holds. Returned in the Liberal interest as member for Mid Durham (1885).

"Crawley, Captain." See NOMS DE PLUME.

Creation Legends. See BIBLICAL ARCHÆOLOGY.

Crèches are homes to which the infants and very young children of the poor can be sent during the day, when both parents are at work. The crèche system is of French origin, the first crèche being opened by a Madame Marbeau, in Paris, more than a quarter of a century ago. Her idea was subsequently adapted in Belgium, where, in Brussels, the crèches are admirable institutions. It was after visiting these that Mrs. Hilton, of London, a member of the Society of Friends, introduced the system into England; where, in 1871, she opened a crèche in the East End of the metropolis. Only children who are suffering from no infectious disease, and of married women, who are unable otherwise to take charge of them, are admitted. These are received at an early hour, and after being passed by an honorary doctor, are handed over to nurses, who wash, clothe, feed, nurse, and amuse them, teaching Kindergarten if old enough, till the mother returns in the evening. Though there were some day-nurseries for children in London prior to the introduction of Mrs. Hilton's Crèche—in connection with which there is an infirmary for sick children—they were not of

the sanitary and educational character of her Home, which occupies three ten-roomed houses—12, 14, and 16, Stepney Causeway—and is under the patronage of H.R.H. Princess Christian. Mrs. Hilton has been the indirect means of establishing similar institutions throughout England, and in some parts of the United States.

Credit Viager. See FIRE AND LIFE INSURANCE.

Cremation. The disposal of the human body after death by the process of cremation, which rapidly resolves the body into its component elements, in an absolutely innocuous manner, is now largely practised throughout the civilised world, where formerly burial in the earth only was carried out. This modern movement in its favour commenced about ten years ago. Up to the present time, over 500 bodies have been cremated in Italy, and in Dresden, Germany some 250 has thus been treated. Cremation societies have been instituted in every European country, and many of the states of America possess them also, and cremation in these states has become a regular practice. There are two patterns of crematories in use—the German and the Italian. The latter was chosen for use at St. John's, Woking, Surrey, where four cremations have already been carried out within the last few months, there being no legal bar to its performance in Great Britain or the Colonies. The cremation of an adult by either process is complete in about an hour, and the ashes, which are perfectly white, weigh about five pounds. The cost of reduction, were it to become common, would be about thirty shillings, but at present is more than treble this sum, owing to the necessity for heating the crematory every time for each cremation. The literature of cremation since 1843 amounts to over 600 volumes, no mean share of them having been produced in England since the first "Essays" published by Sir Henry Thompson. The publishers of the English Society are Messrs. Smith, Elder & Co., and its "Transactions" are replete with plans, and every information as to medical forms of certificate, etc.

Cremor, Mr. William Randall, M.P., was b. 1838. Editor of the *Arbitrator*. Formerly secretary of the International Working Men's Association. Returned in the Liberal interest as member for Haggerston (1885).

Crespigny, Sir Claude de. See BALLOONING.

Cretaceous. See GEOLOGY.

Crews, Hungerford Crews, 3rd Baron (creat. 1806), was b. 1812, and succeeded his father 1835.

Cricket, County. Statistics of matches for 1885.

	Played.	Won.	Lost.	Drawn.
Nottinghamshire	12	6	1	5
Yorkshire	16	7	2	7
Lancashire	11	6	3	2
Kent	9	4	3	2
Surrey	16	8	4	4
Derbyshire	8	1	5	2
Gloucestershire	12	4	7	1
Middlesex	10	2	7	1
Sussex	12	2	8	2

Cricket Fixtures for 1886. See APPENDIX.

Cricket Matches, Eton and Harrow.

Year.	Winner.	Won by
1873	Harrow . .	5 wickets.
1874	Eton . .	5 wickets.
1875	Drawn . .	Rain 1st day.
1876	Eton . .	1 inns. and 24 runs.
1877	Drawn . .	Rain 2nd day.
1878	Harrow . .	21 runs.
1879	Drawn . .	Rain 2nd day.
1880	Harrow . .	95 runs.
1881	Harrow . .	112 runs.
1882	Drawn . .	
1883	Drawn . .	Rain 2nd day.
1884	Drawn . .	Rain 2nd day.
1885	Harrow . .	3 wickets.

Cricket Matches, Oxford and Cambridge.

Year.	Winner.	Won by
1865	Oxford . .	114 runs.
1866	Oxford . .	13 runs.
1867	Cambridge .	5 wickets.
1868	Cambridge .	168 runs.
1869	Cambridge .	58 runs.
1870	Cambridge .	2 runs.
1871	Oxford . .	8 wickets.
1872	Cambridge .	1 inns. and 166 runs.
1873	Oxford . .	3 wickets.
1874	Oxford . .	1 inns. and 92 runs.
1875	Oxford . .	6 runs.
1876	Cambridge .	9 wickets.
1877	Oxford . .	10 wickets.
1878	Cambridge .	238 runs.
1879	Cambridge .	9 wickets.
1880	Cambridge .	135 runs.
1881	Oxford . .	135 runs.
1882	Cambridge .	7 wickets.
1883	Cambridge .	7 wickets.
1884	Oxford . .	7 wickets.
1885	Cambridge .	7 wickets.

Orilly, Mr. Daniel, M.P. He is a member of the staff of the *Nation*. Returned as a Nationalist for North Mayo (1885).

Crime. The latest official returns, issued last autumn from the Home Office (1885), relating to crime in *England and Wales*, give the statistics for 1883-84. These show a decrease of 6·9 per cent. in the total number of the criminal classes at large and known to the police, compared with the return for the previous year. There was also a decrease of 0·1 per cent. in the number of houses of bad character. The number of indictable offences reported by the police decreased by 2,445, or 4·9 per cent., and the number of persons for trial by 252, or 1·7 per cent. In the number of persons summarily proceeded against before justices there was a decrease of 5,533, or 0·9 per cent., and in the total commitments to prison (for which the return is brought up to 1884-5) a decrease of 1,339, or 0·7 per cent. The convictions for murder in 1884 were 28, against 23 in the previous year. The number of verdicts of murder returned by coroners' juries in 1884, however, was 192, of which 163 were for *infanticide*. This latter item shows a considerable increase compared

with the figure, for 1883, which was 87. Of the total number of verdicts of *infanticide* in 1884 as many as 45, or 43·6 per cent., were returned in the county of Middlesex. London compares very unfavourably with the other large towns in respect of this crime. In Liverpool there was not a single verdict for child murder returned during the year, in Manchester there were only 3, in the Bolton district only 1, and in Birmingham only 1. With regard to juvenile crime the returns show a marked decrease. (For further particulars on this subject see *CRIMINAL STATISTICS* in Appendix.)

Crime in the Army. A return, showing the number of offences and desertions in each corps in the army during the year 1884 was issued (December 1885) by order of the War Secretary Mr. W. H. Smith, at the instance of Sir Frederick Fitzwygram, which gives important information as to the state of crime in the army. This return, which was not given to the public by the two previous War Ministers, details the number and percentage to average strength of general courts-martial, district and regimental courts-martial, minor punishments and desertions, in each case together with the station at which the regiment was quartered. The item of desertions is included for the first time; and is the more valuable inasmuch as it demonstrates that locality has very much to do with the matter, as in India, and elsewhere abroad, desertion is all but impossible, while the inducement to several other offences common at home are very much lessened. From a tabular statement furnished it would appear that in the matter of serious crime, as indicated by the number of courts-martial, the Household Cavalry and Royal Engineers are distinctly superior to the Foot Guards and the Cavalry of the Line, while the latter are not so bad as the Infantry of the Line and the Royal Artillery. The crimes dealt with by the general courts-martial are so rare that they only amount to 75 for the whole army; but they are of no value in indicating the tone and condition of the various corps. In the Household Cavalry the 1st Life Guards had the smallest number (7) of courts-martial; while the Blues had the least (35) minor punishments and one solitary deserter as against 9 in the 1st and 14 in the Life Guards. All three regiments appear to be models of good conduct. At home, in the Cavalry Regiments of the Line, the Queen's Bays, in the matter of courts-martial, occupy the most meritorious position, with a proportion of 3·8. These are closely followed by the 15th, 18th, and 7th Hussars. The 20th Hussars are at the bottom of the list, with a percentage of 12·0, while the Scots Greys, 10th Hussars, 11th Hussars, and 3rd Dragoon Guards are not much better. The 16th Lancers, 3rd Hussars, and 5th Lancers show the cleanest sheet as to minor punishments, and the 10th, 11th, and 15th Hussars, 3rd and 5th Dragoon Guards, and Scots Greys are the worst. Desertions were most rife in the 11th and 3rd Hussars, 3rd Dragoon Guards, and Scots Greys, while the 21st Hussars (only 7) and 16th Lancers (9) were comparatively free from that offence. Taking all the heads of crime, the 16th Lancers would appear to be in the most creditable state, and the 11th Hussars in about the least. As to the different batteries of the Royal Artillery, very few show what can be considered a satisfactory return. As an instance in the matter of courts-martial, A

battery 1st Brigade has a percentage of 22, and No. 6 of the Cinque Ports Division and No. 6 of the Welsh Division 25 each, the two latter having also a proportion of 334 and 281 respectively of minor punishments. The Royal Horse Artillery are, generally speaking, more free from crime than the rest of the corps. As regards minor offences the best of all is No. 9 Eastern Division, with 18, and Q Battery 3rd Brigade runs close up, with 22; whilst No. 5 Scottish Division has the highest percentage (95), No. 6 Cinque Ports (334), Q Battery 2nd Brigade and No. 6 Welsh (281 each). There was not much desertion from this arm of the service, except at the depôts, where crime generally appears to have been lamentably prevalent. In the Royal Engineers the record is mostly satisfactory, and on the whole contrasts favourably with most of the other branches. Indeed, the 3rd, 13th, 16th, and 24th have almost a clean sheet; but it must be added that A Troop and the 11th and D, B, and C Companies exhibit a decidedly unpleasant number of minor punishments. In the matter of courts-martial the Guards come out well in contrast with the Cavalry and Infantry of the Line, and the Royal Artillery. The 2nd Battalion of the Coldstreams has the least, and the 2nd Battalion of the Grenadiers the most; while the other five battalions have nearly the same proportion. As to minor punishments there is little to choose between the three battalions of the Grenadiers, the 1st of the Coldstreams, and the 2nd of the Scots Guards, the lowest and the highest figures being 154 and 162; but the 2nd Battalion of the Coldstreams has 198, and the 1st Battalion of the Scots Guards no less than 264. For desertions the 2nd Battalion of the Coldstreams shows the smallest (16), and the 1st Battalion of the same regiment the largest number (34). The battalions occupying the most creditable positions in the Infantry of the Line, in connection with the smallest number of courts-martial, are the 2nd West Riding, the 1st Seaforth Highlanders, 1st Somerset, 1st Wilts, 2nd West Kent, 1st Royal Fusiliers, 1st Northampton, and Yorkshire, 2nd Berks, 1st Lancashire Fusiliers, and 2nd Royal Highlanders. Those most free from minor punishments are the 1st Lancashire Fusiliers, 1st South Stafford, 1st Northampton, 1st Somerset, 1st Gloucester, and 1st Wilts, desertion being least prevalent in the 2nd Suffolk, 1st Somerset, and Royal Irish, 1st Gloucester, 2nd Worcester, 2nd West Riding, 1st Hants, 2nd North Lancashire, 1st Northampton, 1st Wilts, and 2nd Royal Irish Fusiliers. A very black sheet, however, is shown by the 2nd Argyll and Sutherland Highlanders, who had no fewer than 110 courts-martial, 3,457 (or 6'41 per cent.) minor punishments, and 107 desertions. There is only one worse battalion for minor punishments—the 1st North Stafford, which shows the enormous number of 5,404, or 8'15 per cent. For courts-martial the nearest the 2nd Argyll and Sutherland Highlanders in the black list are the 2nd South Stafford, 2nd East Lancashire, 2nd Leicester, 2nd Durham, and 1st Irish Rifles. The worst percentages in minor punishments are as follows:—1st North Stafford, 81; Argyll and Sutherland Highlanders, 64; 2nd Royal Irish Fusiliers, 48; 1st South Wales Borderers, 45; 1st Liverpool, 40; 2nd Highland Light Infantry, 35; 1st North Lancashire, 35; 1st York and Lancaster, 33; 1st Queen's West

Surrey, 305; and 2nd Cheshire, 301. The worst battalions after the 2nd Argyll and Sutherland are the 1st Dublin Fusiliers, 1st Scottish Rifles, 2nd Royal Scots, 2nd Oxford, 1st East Yorkshire, and 1st Royal Lancaster. Most of the infantry depôts exhibit a very large amount of crime under all three heads. As already inferred, the regiments and battalions in India have a better record than those at home. In the cavalry there were but seven courts-martial each in the 7th Dragoon Guards and the 13th Hussars, while there were 15 in the 14th Hussars and 25 in the 17th Lancers, the other regiments showing about a dozen cases each. In minor punishments the 8th Hussars (31 per cent.), the 14th Hussars (37 per cent.), the 13th Hussars (40 per cent.), and the 9th Lancers (43 per cent.) are all comparatively good, while the 7th Dragoon Guards (94 per cent.) and the 12th Lancers (92 per cent.) are at the bottom of the list. In the Infantry the best conducted regiments, as shown under the head of courts-martial, are the 1st Worcester 2nd Royal Fusiliers, 1st King's Own Borderers, 2nd Hampshire, 2nd Norfolk, and 2nd Devon; and as exemplified by a paucity of minor punishments, the 2nd Wilts, 1st King's Own Borderers, and Scottish Rifles, 2nd Liverpool, 1st Royal Welsh Fusiliers, and 2nd Hampshire. The 2nd Bedford, 2nd Warwick, and Royal Scots Fusiliers, and 2nd Royal Lancaster, have a heavy list of courts-martial, and the following show an unusual number of minor punishments—namely, the 2nd Cheshire, 1st Royal Irish Fusiliers, 1st Connaught Rangers, and West York, 2nd Royal Irish, 1st Leicester, and 2nd Seaforth Highlanders.

Crimes Act. Introduced into the House of Commons immediately after the assassination of Lord Frederick Cavendish and Mr. Burke in the Phoenix Park; and passed after obstinate opposition by the Irish members. Its provisions were very stringent. The Lord Lieutenant had power under the Act to suspend trial by jury, to suppress meetings, and to seize newspapers, to draft additional constabulary into any district, etc. There were sections also directed against "boycotting," empowering the Attorney-General to obtain a change of venue as by right, and to have cases tried only by special jurors; and persons were liable to arrest and imprisonment who were found outside their dwellings in proclaimed districts one hour before sunrise or after sunset; and strangers found in proclaimed districts were bound to give a satisfactory account of themselves. There were also powers to make domiciliary visits, and to order witnesses to attend private inquiries before magistrates. The working of the Act was the subject of many and bitter debates in parliament. It was enacted for three years, and Mr. Gladstone announced the intention of his ministry to propose the re-enactment of certain "valuable and equitable provisions." He was defeated, however, before he had an opportunity of proposing the measure, and the Conservative government allowed the Act to drop.

Criminal Law Amendment Act, 1885. This Act consists of three parts—(1) provisions for the protection of women and girls; (2) provisions for the suppression of brothels; (3) definitions and miscellaneous provisions. The first part enacts a maximum penalty of two years imprisonment with hard labour against the procuring of minors for immoral purposes,

or of any female to become a common prostitute or to enter a foreign brothel, or of any female not already residing in a brothel to enter one anywhere. The same penalty is enacted against those who use fraud or threats or noxious drugs in procuring females for unlawful intercourse. The maximum penalty of penal servitude for life is extended to the defilement of girls under thirteen, and the maximum penalty of two years' imprisonment with hard labour is extended to the defilement of girls under sixteen years. The same penalties are enacted against householders permitting the defilement of girls under thirteen and under sixteen years respectively upon their premises. Any person withdrawing an unmarried girl under the age of eighteen from the possession of those who have lawful charge of her, and with intent that she should be unlawfully known by any man, is subjected to a maximum penalty of two years' imprisonment with hard labour. The same maximum penalty is enacted against any person detaining a woman against her will in a brothel or for immoral purposes in any premises. Any justice of the peace, upon information on oath that any woman or girl is detained anywhere within his jurisdiction for immoral purposes, may issue a warrant to search the premises and to remove such woman or girl to a place of safety. If in the trial of any offence under this Act it should be proved that any person having authority over a girl of sixteen has furthered her seduction or prostitution, the court has power to divest such person of his or her authority, and to appoint as her guardian any person whom it may think proper. The second part enacts stringent penalties, recoverable on summary conviction, against the keepers of brothels, their assistants, and all persons who knowingly allow their premises to be used for the purposes of a brothel. The enactments contained in the third part are not of general interest. (See Mead and Bodkin's "Criminal Law Amendment Act.")

Criminal Law Amendment Act, Repeal of. See TRADES UNION.

Croatia. See AUSTRO-HUNGARY.

Croatians, Legislation. See AUSTRIAN POLITICAL PARTIES.

Crofter Members. See CROFTERS.

Crofters. Crofters are the descendants of the Highland clansmen, and number about 70,000. They occupy small farms or crofts, the produce of which, together with occasional fishing, constitutes their entire maintenance. They form the majority of the population of the western islands of Lewis, Skye, Harris, Uist, Tyree, Eigg, and Coll; also a considerable proportion of the inhabitants of the counties of Ross, Argyll, Sutherland, Inverness, and the islands of Orkney and Shetland. They are besides to be found in the counties of Aberdeen and Perth. Up to 1745 the crofting population held the lands in common with the chiefs, with common rights of pasture, fishing, and shooting; but since that date, encouraged by the British Government, the chiefs gradually assumed the rights and privileges of the sons of the soil. Large clearances commenced early in the present century, and whole districts were depopulated to make room for extensive sheep farms. From Sutherlandshire alone 15,000 persons were expatriated, and the example of the Duke of Sutherland was soon followed by the landlords all over the Highlands. The

majority of the Highlanders who were permitted to rent crofts were driven from their fertile straths to eke out a miserable existence on the inhospitable sea border. Time sheep farming became unprofitable, and gave place to the preservation, on a gigantic scale, of deer and grouse. Thousands of acres of the finest grazing land were turned into deer forests; and as an example it may be mentioned that an American at present possesses in Ross-shire a forest extending over 400 sq. m. In the winter of 1882 a wide-spread destitution in the crofting districts induced a number of Highlanders in London to form themselves into an organisation called the **Highland Land Law Reform Association**, with the object of agitating for an inquiry into the grievances of the crofting and cottar population, and to endeavour to amend the laws under which the people had been reduced from prosperity to a state bordering on chronic destitution. A **Royal Commission** was appointed by the Liberal Government, in March 1882, which issued a report condemning the prevailing system, and made recommendations which many, including the Duke of Argyll, considered to be revolutionary in character. In 1885 the Government introduced a **Land Bill**, which was severely criticised in the House of Commons by Mr. Macfarlane, M.P., and others, on account of the inadequate nature of its provisions, so it was resolved to defer the measure until after the general election of that year. At that election five "crofters" members were returned: namely, Mr. Macfarlane (q.v.) for Argyll; Mr. Fraser Mackintosh (q.v.) for Inverness; Dr. Macdonald (q.v.) for Ross and Cromarty; Dr. Clark (q.v.) for Caithness; and Mr. Macdonald Cameron (q.v.) for the Western Burghs. The demands of the crofters are first of tenure and the establishment of a Land Court to fix the rents; this court also to be empowered to compel a re-apportioning of the land for the benefit of the native population. In other words, this demand is to break up deer forests and sheep farms that are suitable for agricultural purposes, and give the land to the crofters and cottars. Cottars have no land, but subsist on fishing and whatever employment they can obtain as labourers. Among this class great distress and destitution invariably prevail. The crofters are renowned for the martial capabilities of their warlike forefathers. Five thousand, it is estimated, were present at Waterloo; now, owing to their decimated condition and facilities for emigration, only 1,600 of their sons are serving in the army. A bill to remove existing grievances in the possession of the holdings has been introduced in the present session by Mr. Trevelyan. The bill was read the second time on March 8th, 1886. Its provisions have, however, met with considerable opposition from both sides of the House, and numerous amendments have been proposed, especially by the Scotch members. The bill, which is likely to undergo considerable modification before passing into law, went into Committee on March 29th.

Crofton, Edward Henry Churchill Crofton, and Baron (creat. 1797), was b. 1834, and succeeded his father 1869. Elected a representative peer for Ireland (Feb. 1873).

Croll, D. J. See GLACIAL PERIOD.

"Cromarty" Burner, The. See ILLUMINANTS.

Crompton, Mr. Charles, Q.C., M.P., son of the late Sir Charles Crompton, was b. 1833. Educated at Univ. Coll. School and College, London, and Trin. Coll., Cambridge, where he was fourth Wrangler (1855) and Fellow of his College. Called to the bar at the Inner Temple (1864); Q.C. (1882). Returned in the Liberal interest as member for the Leek Division of Staffordshire (1885).

Cronstadt Ship Canal, The. See **ENGINEERING**.

Cross, Rt. Hon. Sir Richard Assheton, P.C., M.P., b. 1823, at Red Scar, near Preston, Lancashire. He was educated at Rugby, and afterwards graduated as A.B. in Trinity College, Cambridge. He was called to the bar at the Inner Temple in 1849, of which he is a bencher. He is a Deputy Lieutenant and J.P. for Cheshire and Lancashire. He was elected as member for Preston in the Conservative interest (1857-62). He remained out of parliament till 1868, when he was returned for South-West Lancashire, in opposition to Mr. Gladstone. On the formation of Mr. Disraeli's ministry, in 1874, Mr. Cross was appointed Home Secretary and a Privy Councillor. In the former capacity he introduced some very useful measures, which were passed into law. He received the honorary degrees of D.C.L. and LL.D. from the Universities of Oxford and Cambridge, and was made K.C.B. in 1880. At the general election of 1880 Sir R. Cross was re-elected for South-West Lancashire; and on Lord Salisbury's accession to power (1885) resumed his former post as Secretary for the Home Department until Jan. 1886. Re-elected for the Newton Division (1885).

Crossley, Mr. Edward, M.P., the eldest son of the late Mr. Joseph Crossley, and nephew of the late Sir F. Crossley, M.P., was b. at Halifax, 1842. Educated at Owen's Coll., Manchester. Returned in the Liberal interest as member for North Sowerby Division, West Riding (1885).

Crossley, Sir Savile Brinton, M.P., was b. 1857. Educated at Eton and Balliol Coll., Oxford. He is J.P. for Suffolk, and an officer in the 2nd Brigade, Eastern Div., Royal Artillery. Returned in the Liberal interest as member for North Suffolk (1885).

Crossman, Colonel Sir William, R.E., K.C.M.G., M.P., was b. 1830. Colonel Crossman, who has seen much service abroad, recently commanded the Royal Engineers in the Southern District. Returned in the Liberal interest as member for Portsmouth (1885).

Cross-Remainders. See **LAND QUESTION, THE**.

"Crownfield, Christopher." See **NOMS DE PLUME**.

Crown Colonies. See **BRITISH EMPIRE, COLONIES, ETC. (APPENDIX)**.

Crown Lands. The mediæval king of England was not only the ultimate lord of all the land of the kingdom, but also lord in the usual sense of a very large demesne, the rents and profits of which were a principal source of revenue. In that age the revenue and expenditure of the state were never clearly distinguished from the revenue and expenditure of the sovereign. The hereditary revenue, the taxes granted for life, and the occasional subsidies, were the king's, subject to a general understanding that he should carry on the government of the country. Thus successive sovereigns granted away the Crown lands as a

private person might grant away his farms. Although frequently increased by immense confiscations, such as those in the Wars of the Roses or at the suppression of the monasteries, the Crown lands on the whole steadily declined in extent and value. Charles II. in three years dissipated half the revenue of the Crown lands; William III. was obliged to recall a grant of four-fifths of the county of Denbigh to the Earl of Portland. The income of the lands which remained was frittered away. Leases were carelessly or corruptly granted; renewals were conceded upon such terms as the tenants chose to give; the revenue was received almost altogether in the shape of fines; and waste and corruption in the management of the estates which had not been granted away reached such a height at the accession of George III., that the Crown lands produced a net annual revenue of little more than £6,000 a year. George III. was the first English king who surrendered the hereditary revenues, including the revenue arising from the Crown lands, in exchange for a fixed Civil List. In 1786 an Act was passed for making an inquiry into the condition of the woods, forests and land revenues of the Crown; and eight years later there was passed an Act for their better administration. Originally there had been one Surveyor-General of woods and forests, and another of land revenues. In the year 1810 the functions of both were vested in a single commission, which in 1832 was further intrusted with the care of public works. But in 1851 the department of woods and forests was again separated from that of public works, and has continued separate ever since. The revenue of the Crown lands reached in 1798 a total of £201,250 a year, in 1830 of £373,770, and in 1860 of £416,530. This revenue is paid into the Consolidated Fund; each sovereign since George III. having received a fixed Civil List in lieu of the hereditary revenues. But the revenues of the Duchies of Lancaster and Cornwall are still enjoyed, those of the former by the reigning sovereign, and those of the latter by the Prince of Wales as Duke of Cornwall. Return for the year ending March 31st, 1885 (published in December last):—

	Receipts.		Expenditure.	
	£	s. d.	£	s. d.
Land revenue, including one moiety of the net receipt from mines . . .	452,718	2 4	54,046	0 5
Windsor Great Park and woods . . .	4,335	17 8	23,681	18 2
Forests and woodlands	26,251	19 1	22,007	0 5
	483,305	19 1	99,734	19 0
Salaries, legal and other expenses paid out of Vote (of which about one-tenth is recovered as part of the office charges for conveyances, etc.			23,291	19 7

(See Sir Thomas May's "Constitutional History

of England," whence the above facts have been collected; and for the antiquities of the subject Stubbs' "Constitutional History of England.")

Crown, The. Originally a mere fillet of linen, the crown was, in common with most of the regalia, borrowed from the East on the introduction of Christianity into Europe. It is now used only for coronations and at the openings of parliament. Until the time of the Reformation it was in the charge of the Dean and Chapter of Westminster; but has since been preserved in the Tower of London. In 1649 the regalia were destroyed, new crowns having been made for Charles II. at his coronation.

"**Crowquill, Alfred.**" See NOMS DE PLUME.

"**Cruiser, Benedict.**" See NOMS DE PLUME.

Crystalline. See MINERALOGY.

Crystallography. See MINERALOGY.

Crystal Palace Concerts. See MUSIC FOR 1885.

Crystals. See MINERALOGY.

Ctesias. See ASSYRIOLOGY.

Ctesibius. See FIRE EXTINCTION.

Cuba. See SPAIN.

Cuban Revolt. See SPAIN.

Cubitt, The Rt. Hon. George, M.P., P.C., Educated at Trin. Coll., Cambridge. He is a Deputy Lieutenant for Surrey and Middlesex. He was second Church Estates Commissioner (1874-79). Returned in the Conservative interest as member for Mid-Surrey (1885).

Culebra Col. See PANAMA CANAL.

Cumberland and Teviotdale, H.R.H. Ernest Augustus William Adolphus George Frederick, K.G., 3rd Duke of (creat. 1799), was b. 1845; cousin to the Queen. A colonel in the British army. Mar. H.R.H. Princess Thyra, dau. of the King of Denmark. The 2nd Duke was King of Hanover.

Cuneiform Inscriptions. See ASSYRIOLOGY.

"**Cup, The.**" See IRVING, HENRY.

Currant Trees, Black. See FRUIT FARMING.

Currant Trees, Red. See FRUIT FARMING.

Currey, The Rev. George, D.D., Master of the Charterhouse, d. April 30th, 1885. He was b. 1816, and educated at the Charterhouse School, and St. John's College, Cambridge, of which he became a scholar (1834). In the following year he obtained the Bell's University Scholarship, and in 1838 took his Bachelor's degree, being 14th Wrangler and 4th in the first class of the Classical Tripos. He was elected a Fellow of his College (1839). Dr. Currey was Hulsean Lecturer at Cambridge (1851 and 1852). In 1872 he was appointed to the Prebendal stall of Brownwood in St. Paul's Cathedral, and in 1877 was nominated one of the examining chaplains to the Bishop of Rochester.

Currie, Sir Donald, M.P., C.M.G. (1877), K.C.M.G. (1881), F.R.C.S. Commissioner of Lieutenancy for the City of London. Managing Director of the Donald Currie line of steamships. Returned in the Liberal interest as member for Perthshire (1880-85); West Perthshire (1885).

Curriers, The Worshipful Company of. See CITY GUILDS, THE.

Curtius, Prof. G. See BOOK TRADE.

Curwen, Rev. John. See TONIC SOL-FA.

Curwen, Mr. J. Spencer. See TONIC SOL-FA.

Curzon, Viscount, M.P., b. 1861, the eldest son of Earl Howe. Is a J.P. for Bucks, and was elected in the Conservative interest for South Buckinghamshire (1885). He married a daughter of the late Duke of Marlborough. Viscount Curzon was the mover of the Queen's address, January 1886.

Custody of Infants Bill. See WOMEN'S RIGHTS.

Customary Court. See MANOR.

Customary Law. Law in the strict sense of the term cannot exist until the state is formed. Society, however, passes through various stages earlier than the political, and the family and tribe are older than the state. In these earlier stages law exists only as custom enforced by public opinion, which regards certain customs as useful to men or pleasing to the gods. Even when the state has been organised, it does not proceed to legislative innovation on a large scale. The old customs, at least the most important of them, are sometimes set out in writing, more or less in the form of a code, as was the case in several ancient communities, or they are adopted as guides by the judges who represent the state, and at once enforce and define custom, as was the case in mediæval England. The common law of England was, in fact, a body of custom transformed into law by the action of the courts of justice, and has been described as customary law. Even at the present day the courts will give effect to customs which do not contravene any law properly so called, are reasonable in themselves, and have been regularly acted upon for an indefinite time by those whom they affect.

Customs. See REVENUE, THE.

Cutlers, The Worshipful Company of. See CITY GUILDS, THE.

Cycling, completely marked out as a separate branch of athletics, is a method of journeying by means of wheeled machines: the bicycle with two, the tricycle with three, and the velocipede with four wheels. Of these the tricycle is the favourite and safest machine, although the number of bicyclists is greater, as with the former ladies and elderly men and children can travel with speed and safety. The velocipede is a thing of the past. There are upwards of 280 clubs in the United Kingdom, of which the Metropolis contains over 80. The number of clubmen is computed at not less than 14,000. A cycling camp has been formed during the past few years at the Alexandra Palace, and cycling races have long formed an integral part of the principal athletic meetings in the country.

Cyclist Union Championships. See APPENDIX.

Cyclonic Area. See METEOROLOGY.

Cyprus. See TURKISH CONVENTION.

Cyrus, Cylinder of. See BIBLICAL ARCHÆOLOGY.

Czechs, Legislation. See AUSTRIAN POLITICAL PARTIES.

D

Dacre, Thomas Crosbie William Trevor, 22nd Baron (creat. 1307), was b. 1808, and succeeded his father 1853. Was M.P. for Herts (1847-52).

"Dagonet." See Noms DE PLUME.

"Daily Chronicle." Morning paper (1d.). Originally a local paper for the whole of London, it was purchased by Mr. Lloyd (1876), and converted into an imperial Liberal organ with an independent line of action. It has a very large circulation. Editor, Mr. R. W. Boyle (q.v.).

"Daily News." A prominent Liberal daily paper (1d.). Established 1846. It made much headway in 1870-71, owing to its early and impartial telegrams respecting the Franco-German war; and again in 1876, when Mr. MacGahan, its Constantinople correspondent, first called attention to the Bulgarian Atrocities. Charles Dickens was its first editor, and it is at present edited by Mr. H. W. Lucy (appointed 1886).

Daily Railway Share List. See STOCK EXCHANGE OFFICIAL LIST.

"Daily Telegraph." Morning paper (1d.). Founded 1855. Circulation approximates to a quarter of a million daily. Its politics are Independent Liberal, and it takes a foremost part in the discussion of great social problems. Has special wires from Paris and Vienna. In late years it has employed Mr. Smith on his successful special commission to Assyria, and Mr. Henry Stanley to Central Africa.

Dairy Farming is that branch of agriculture which has in view specially the production of milk, and the manufacture therefrom of butter and cheese. The dairy districts of Britain are the western counties of England and the south-western counties of Scotland. The generally humid climate of these districts is favourable to the growth of grass, and the grazing of cows and other cattle. The same feature in the climate of Ireland makes it suitable to the development of this important branch of agriculture. The improved facilities afforded by the railways in the rapid transit of fresh milk to the great centres of population have increased the demand for this product to an enormous extent within the last few years. The supplying of this daily demand for fresh milk is now one of the most important and probably remunerative industries connected with dairying interest; and our dependence upon the foreign importations for our supplies of butter and cheese has in consequence increased. But British dairy farming is on the whole gradually improving its resources. The import of dairy products is only a tithe of what it was twenty years ago. The **Royal Agricultural Society**, which offers prizes for improved utensils and dairy machinery, and the **British Dairy Farmers' Association** formed a few years ago, which by means of lectures and dairy exhibitions diffuses a mass of useful information, have done much to promote the interests of dairy farming. In dairy farms proper, on which is a large area of meadow or pasture with a small area of arable land, where the live-stock consists almost entirely of cows, the latter are sent to grass in summer, being brought into the stalls twice a day for milking, and probably to get a little cake or

meal if the grass is not abundant. On arable farms, however, where the dairy does not form the principal or important part of its economy, the cows are **stall fed** both summer and winter on fodder crops, supplemented by more concentrated kinds of food. The natural time for calving is from January to May; but it is made to take place at all times of the year, so as to provide fresh milk and butter for the market. A very small portion of the milk produced on a dairy is used in the rearing of calves. There are various ways of testing milk, but it is always important to show the amount of solids and of butter-fat in it. **Butter** is made by allowing the milk to rest in shallow vessels until the globules of cream have had time to rise to the surface. The cream is then skimmed off into a churn, which is revolved at a regular rate. By this process the butter-fat is massed together in a lump, and the liquid or buttermilk is drawn off, and replaced by water, in order to wash as thoroughly as possible the milk out of the butter. When the water has been changed sufficiently often as to run off clear, the butter is taken out, and put into proper shape for the market. **Oleomargarine** butter is an article simply made by churning oil-fat along with milk from which a portion of the cream has been taken. It is extensively manufactured in America and on the Continent; and is in many cases so good an imitation of the genuine article that only experts can discover the spurious article. If properly made it is not an unwholesome food, but the commercial immorality—so widely practised, it is to be feared—of palming off this article as pure-milk butter is to be condemned. There are many British varieties of **cheese**—among them Cheddar, Cheshire, Dunlop, and Stilton. The modes of manufacture are the same in principle, though differing in slight details. Milk at a temperature of 80 degrees Fahr. is put into a vat, where it is mixed with **rennet**, a substance taken from the stomach of sucking calves. It has the virtue of separating the solid portion, or curds, from the liquid portion, or whey. On the whey being withdrawn the curd is pressed, heated, and cut, and re-pressed, until the whey is thoroughly worked out of it. The product when salted becomes cheese, which, with a calico band round it, is placed in a room with a temperature of 65° Fahr. Cheese, though in a less perishable form than milk, retains all the nutritive elements of that liquid, which is regarded as the standard or typical food, containing, as it does, all the constituents necessary for the sustenance and growth of animals. Cheese, however, contains much too large a proportion of flesh-formers or albuminoids to render it a well-balanced and invariably wholesome food, and is therefore consumed along with wheaten bread. In this way it furnishes the most nutritious and cheapest food for those who pursue an active life out of doors. Pound for pound it contains more nitrogen than butcher's meat. As in the case of butter, a large quantity of spurious cheese is sold in our markets. This is **Oleomargarine cheese**, which is made of skimmed milk with the addition of some cheap form of

fat. America is also the principal provider of this article, which imitates the pure-milk cheese so closely in appearance and flavour that even experts have often a difficulty in distinguishing it from the pure article. When honestly made it is a palatable food; but the sin here, as in the case of impure butter, lies in selling it under the brand or name of the genuine article. The production and exportation to this country of **condensed milk**—milk with a large proportion of its watery parts withdrawn by means of evaporation—is an important industry in Switzerland, where milk is considerably cheaper than it is in this country. Factories also exist in England, as at Aylesbury and Middlewich, and at New York.

Dalhousie, John William Ramsay, 13th Earl of (creat. 1633); Baron Ramsay (1875), by which last title he sits in the House of Lords, was b. 1847, and succeeded his father 1880. M.P. for Liverpool (March to July 1880); Lord-in-waiting to the Queen (Sept. 1880 to June 1885). Appointed (March 27th, 1886) Secretary for Scotland. The 11th Earl (as the Rt. Hon. Fox Maule) held the offices successively of Vice-President of the Board of Trade, Secretary at War, President of the Board of Control, Keeper of the Privy Seal of Scotland, and was also M.P. for Perthshire, Elgin, and Perth.

"Dalmocad." See NOMS DE PLUME.

Dana, Prof. See CORAL REEFS.

"Danbury Newsman, The." See NOMS DE PLUME.

Darnley, John Stuart Bligh, 6th Earl of (creat. 1725); Lord Clifton (1608), by which title he holds his seat in the House of Lords; was b. 1827, and succeeded his father 1835.

Dar Runga. See SOUDAN.

Dartmouth, William Walter Legge, 5th Earl of (creat. 1711), was b. 1823, and succeeded his father 1853. Was M.P. for South Staffordshire (Feb. 1849 to Nov. 1853). The first peer was sent as Admiral of the Fleet to demolish Tangier. He was, however, committed to the Tower at the Revolution.

Dartrey, Richard Dawson, K.P., 1st Earl of (creat. 1866), was b. 1817. Holds the second title of Lord Cremorne.

Darwin, Charles Robert, b. at Shrewsbury, Feb. 12th, 1809. Grandson of Josiah Wedgwood the potter, and of Erasmus Darwin, author of the "Botanic Garden" and of "Zoonomia," in which there is a distinct foreshadowing of the ideas of Charles Darwin as to the origin of species. Son of a country doctor. Educated at Shrewsbury School, Edinburgh, for medicine, and Christ's College, Cambridge, with a view to the Church. Took B.A. and proceeded M.A. Professor Henslow, his teacher, recommended him as naturalist to H.M.S. *Beagle* on its voyage round the globe. The journey lasted from December 27th, 1831, to October 2nd, 1836. In 1839 he married his cousin. In 1842 went to live at Down, near Beckenham, in Kent (where he died April 19th, 1882), constantly working, experimenting, observing, recording, reflecting, generalising. His chief works fall under five heads. (1) *General*. "The Naturalist's Voyage round the World," a record of the five *Beagle* years; necessarily touching upon all branches of science. In it are hints of the direction in which his mind was turning in the consideration of biological problems generally, and the origin of living forms especially. (2) *Geological*. These, three in number, all grew out of the observations made during the five

years' absence. (a) "Structure and Distribution of Coral Reefs," 1842 (see CORAL); (b) "Volcanic Islands"; (c) "Geology of South America." (3) *Zoological*. (a) "Monograph of Cirripedia," 1851-4, an exhaustive treatise on the barnacle and acorn-shell group; (b) "Vegetable Mould and Worms," 1881, an expansion of a paper in the "Transactions of the Geological Society" for 1840, with additions due to forty years of observation. (4) *Botanical*. (a) "Fertilisation of Orchids," 1862; (b) "Climbing Plants," 1865; (c) "Cross and Self-fertilisation in Plants," 1876; (d) "Forms of Flowers," 1877; (e) "Movement in Plants," 1880. (5) *Evolution Works*. (a) "Origin of Species" (q.v.), 1859—reasonings and conclusion on this subject; (b) "Animals and Plants under Domestication," 1860—certain of the facts on which the reasonings and conclusions are based; (c) "Descent of Man," 1871—application of the principles of (a) to man; (d) Expression of the Emotions—"yet further application of them with a view to the solution of certain physiological and psychological problems; (e) A posthumous essay on Instinct, read at the Linnean Society on Dec. 6th, 1883—"A Solution of Certain Difficulties in connection with Instinct and the Theory of Natural Selection" (q.v.). Besides these Darwin wrote two prefaces, one to Kerner's "Flowers and their Unbidden Guests," the other to the English translation of Hermann Müller's "Fertilisation of Flowers." The best popularisations of Darwin for non-scientific readers are the works of Grant Allen, Haeckel's "Natural History of Creation," and "Pedigree of Man," and Aveling's "Popular Darwin" and "Student's Darwin."

Darwin, Erasmus. See NATURAL SELECTION.

Daudet, Alphonse, distinguished French novelist, born at Nîmes, May 13th, 1840; he began as master in a college. In 1857, repairing to Paris, he became a litterateur and published "Les Amoureuses" (1858), and "La Double Conversion" (1861); these two works had no great success. In 1861 he became secretary to the Duke of Morny, under whose auspices he travelled in Italy and the East. Amongst his numerous works his greatest success was "Fromont Jeune et Risler Aîné," a work which went through more than forty editions, and was crowned by the Academy. He is the author also of "L'Évangéliste" (1882).

Davies, Mr. David, M.P., was b. 1818. He sat for Cardigan District in the Liberal interest (1874-85). Returned for Cardiganshire 1885. Mr. Davies, a coal owner in Wales, is J.P. for Montgomeryshire and Deputy-Lieutenant for Cardigan county.

Davies, Mr. Richard, M.P., Liberal member for Anglesey, was b. 1818. He was appointed High Sheriff (1858), Lord Lieutenant and Custos Rotulorum of Anglesey (1884), and is (1886) J.P. for Carnarvonshire. M.P. for Anglesey (1868-85); re-elected 1885.

Davies, Mr. William, M.P. A solicitor at Haverfordwest. Returned in the Liberal interest as member for Haverfordwest (1880-85); Pembrokeshire (1885).

Davey, Sir Horace, Q.C., Solicitor-General in the present Gladstone administration (Feb. 1886), receiving the honour of knighthood.

Davison, James W., musical critic, d. March 24th, 1885. Madame Arabella Goddard, after having been his pupil, became, in 1860, his wife. Mr. Davison wrote several songs, to

words of Keats and Shelley. For more than a quarter of a century Mr. Davison was the musical critic of *The Times*, and editor of the *Musical World*.

Davitt, Michael, b. 1846 in the village of Straide, co. Mayo. His father, who was a small farmer, was evicted when Davitt was but four years of age; and he has frequently referred in speeches and writings to this event, as colouring his whole life, and forming the groundwork of his political creed and action. For several years he lived at Haslingden, Lancashire; when a boy he lost his right arm, through an accident in a mill. After this he turned his attention to self-education, and was greatly helped by being employed by a stationer of the town. He became connected with the Fenian movement, and was present at the attack on Chester castle. Afterwards he was engaged in buying and transporting arms to Ireland, and being detected, was tried, convicted, and sentenced to fifteen years' penal servitude. He has given full accounts of his prison life in evidence before the committees of parliament on convict treatment, and in a pamphlet published after his release, and in "Leaves from a Prison Diary." He was released after seven years and seven months of his sentence had expired. He then went on a lecturing tour through England, Ireland, and Scotland, and afterwards through various cities in America. While in the latter country he fell in with some leading Irish Americans, who had conceived the idea of a new land movement in Ireland, on the basis of peasant proprietary, and accepted their views. On his return to Ireland he succeeded, after many difficulties, in gaining the adhesion of several influential persons—and finally of Mr. Parnell—to his views. He organised a number of meetings first in County Mayo, where, owing to the three bad harvests of 1877-78 and 1879, there was great distress and a general inability to meet the existing rents. The first meeting was held at Irishtown, in that county, in April 1879, and from this meeting the birth of the *Land League* is usually dated. Davitt was not present, owing to some accident. He then took a very active part in organising the new movement; again visited America; and shortly after his return was again arrested, and sent back to penal servitude. He was released after fifteen months' imprisonment. Since that period he has lectured and written a good deal on the Irish question.

Dawnay, The Hon. Lewis Payn, M.P., second son of the seventh Viscount Downe, was b. 1846. Educated at Eton. Late Colonel Coldstream Guards. Returned in the Conservative interest as member for Thirsk (1880-85); re-elected, Thirsk and Malton, North Riding, 1885.

Dawson, Mr. Richard, M.P., was b. 1855. Educated at Hertford Coll., Oxford. Was private secretary to Rt. Hon. H. Chaplin when the latter held office as Chancellor of the Duchy of Lancaster (1885-86). Returned in the Conservative interest as member for East Leeds (1885).

Day, Astronomical. See PRIME MERIDIAN.

Days of Commemoration. See COMMEMORATION, DAYS OF.

Days of Devotion. The Red-Letter Saints' Days of the Anglican Calendar, together with Easter Monday, Easter Tuesday, Whit Monday and Whit Tuesday, on which the faithful attend mass through devotion (*de fide*).

Days of Obligation. All Sundays, and Christmas, the Circumcision, Epiphany, the Ascension, and All Saints' days, on which the faithful attend mass through obligation (*de obligatione*).

Dean Cabinet, The. See AUSTRO-HUNGARY.
Dean and Chapter. A corporate body, consisting of the Dean, who is president, together with his canons or prebendaries, who form the Chapter. They are the council of a Bishop, govern the cathedral under him, and also assist in the celebration of divine service.

Deans, Various Kinds of. **Dean of Arches**, the "official principal" of the Archbishop of Canterbury, is the Judge in the Metropolitan Court of Canterbury, originally held in the church of St. Maria de Arcubus (St. Mary-le-Bow).—**Dean, Cardinal**, the senior Cardinal Bishop of the Sacred College of Cardinals at Rome, who, amongst other honours, receives the first visits of foreign ambassadors, and consecrates the Pope, should he not be a bishop.—**Dean of a College**, amongst other functions, has the supervision of the morals of the college in his charge.—**Dean of a Monastery**, the superior over ten monks.—**Dean of Faculty**, also called **Master of Faculty**, is the head of the Faculty Committee, a tribunal pertaining to the Archbishop of Canterbury, which creates rights to pews, monuments, burials, grants, dispensations, etc.—**Deans, Honorary**, are the chiefs of certain Churches (*e.g.*, chapel Royal, St. James's), but without any jurisdiction.—**Dean of Peculiars**, is a Dean without a Chapter, but invested with jurisdiction—*e.g.*, the Dean of Arches (*v. supra*) and the Dean of Battle.—**Dean, Rural**, of very early origin, but now without much authority. He has no absolute jurisdiction, his duties consisting in executing all processes directed to him by the Bishop, reporting on the conduct of his clergy and laity, and in examining candidates for confirmation.

Deasy, Mr. John, M.P., was b. 1856. He is a member of the Board of Guardians in Cork city. Returned as a Nationalist for Cork City (1884-85); West Mayo (1885).

Death, Accidental. See CORONERS' INQUESTS (APPENDIX).

Debt, Imprisonment for, was abolished by the Debtors' Act, 1869 (32 & 33 Vict. c. 62), excepting in the case of a defaulting trustee or of a debtor who is ordered by court to pay (*i.e.*, a judgment debtor), and is demonstrably able yet refuses to do so. This Act also gives powers for the arrest and imprisonment, pending security being given, of a defendant whose presence in an action is material to the prosecutor, and who is about to leave England; and it further provides for the punishment of fraudulent debtors.

Deceased Wife's Sister (Marriage with) Bill, 1885. This Bill was intended to legalise marriage between a man and the sister of his deceased wife. The Bill was retrospective, but contained savings of marriages and of rights of property which might otherwise have been effected. A similar Bill has been brought in almost every session for many years back, and has passed the House of Commons several times. But it has never yet become law.

Declus. See EGYPTOLOGY.

De la Beche, Sir H. T. See GEOLOGICAL SURVEY.

De Clifford, Edward Southwell Russell, 24th Baron (creat. 1299), was b. 1855, and succeeded his father 1877. The 1st Baron was

Earl Marshal of England (1307), and fell at the battle of Bannockburn.

Decree nisi. A decree nisi is a provisional decree, which will be made absolute within a given time unless some reason is shown to the court why it should not be made absolute. It means literally a "decree unless" (Latin *niisi*). If within the time appointed good reason can be shown for such a proceeding, the decree nisi will be reversed, or a further inquiry will be ordered.

De Donis, Statute of. See LAND QUESTION, THE.

De Facto. A phrase used in antithesis to "de jure," to describe that which is in fact, as opposed to that which is legal. Thus, after the expulsion of the Rump, Cromwell was *de facto* sovereign of England, although Charles II. was *de jure* sovereign from the day of the execution of Charles I.

De Fouvelle, M. See BALLOONING.

De Freyne, Arthur French, 4th Baron (creat. 1851); b. 1855; succeeded his father 1868.

Delagoa Bay. Situated on the east coast of South Africa, on the twenty-sixth parallel of S. latitude. It forms the southern extremity of the Portuguese territory of the Mozambique coast. The port and settlement in the bay is known as Lourenço Marques. The British Government claimed a portion of the bay, but in 1875 the claim was referred to the arbitration of Marshal M'Mahon, President of the French Republic, and his decision was given in favour of Portugal. A concession for the construction of a railway from the port inland into the Transvaal was granted by the King of Portugal in 1876, the Portuguese Government agreeing to give a subsidy equivalent to half the cost of the works through the Portuguese territory, a distance of thirty miles; but the undertaking fell through, on account of the failure of the Government of the Transvaal to obtain a loan for the construction of their portion of the line, a distance of 100 miles. In 1883 a fresh concession was obtained from the King of Portugal, and a company was formed in London for the construction of the line. But delays have arisen from causes which cannot here be specified, and it is not yet commenced. The importance of this railway to South Africa is universally acknowledged, since it would shorten the route to the South African Republic and to the vast interior beyond by three or four hundred miles, and would throw open a large and important harbour and coaling station for the east,—the whole of the south-eastern portion of the Transvaal being a vast coal field,—and would also help towards the rapid development of the gold fields of the Transvaal. D'Urban, in Natal, is at present the nearest port for the Transvaal, but is 380 miles from Pretoria, a distance which has to be traversed by ox-wagon. The Natal Government proposed to extend their railway system to the Orange Free State and the Transvaal; but the project was discouraged by Lord Derby, then Colonial Secretary, who pointed out that the Delagoa Bay railway would "absorb all the traffic which the Transvaal Government can bring upon it," so that it is easy to see why the latter is not popular in Natal, whilst the impetuosity of the Government of the South African Republic is a bar to the necessary extension of the line through the Transvaal, in accordance with the agreement between that

country and Portugal. Delagoa Bay is available for vessels of large tonnage, whereas D'Urban is obstructed by a bar; the Olifants or Krokodil river, which empties itself into Delagoa Bay, is navigable for steam launches for a considerable distance; and if the swamps around the coast could be properly drained and cultivated, the deadly malarial fever, which is now so great a drawback, would probably disappear, and with it the poisonous tsetse fly, so destructive to horses, dogs, and cattle in that part of the country.

Delamere, Hugh Cholmondeley, 2nd Baron (creat. 1821); b. 1812; succeeded his father 1855. Represented Denbighshire in parliament (1840-41), and Montgomery (1841-47).

De-la-Warr, Rev. Reginald Windsor Sackville, 7th Earl (creat. 1761); b. 1817; succeeded his mother in the barony of Buckhurst in 1870, and his brother in the earldom and other honours in 1873. Was rector of Withyham, Sussex (1840-65). High Steward of Stratford-on-Avon since 1871.

Delbrück, Dr. See GERMAN POLITICAL PARTIES.

Delegation. See AUSTRIAN POLITICAL PARTIES.

Delhi. See COOLIE.

De L'Isle and Dudley, Philip Sidney, 2nd Baron (creat. 1835); b. 1828; succeeded his father 1851. Trustee of the National Portrait Gallery.

Deliyannis, Theodore. A Greek statesman. In the stormy arena of Hellenic politics M. Deliyannis, in 1885, headed the opposition and led his party to victory, a success which was confirmed at the general election. On Feb. 17th, 1885, the government of M. Tricoupis sustained an unexpected defeat, the Chamber of Deputies having passed a vote of want of confidence by 108 to 104 votes, and M. Tricoupis in consequence tendered his resignation. On the following day M. Deliyannis was received by the King, a crowd of people accompanying him to the palace. Another audience was granted on the next day; and on the 20th, it becoming known that the King was opposed to a dissolution, the announcement was made that M. Deliyannis would ask the chamber to give him time to decide upon a course. On the 21st M. Deliyannis waited upon King George again, and urged his Majesty to dissolve parliament, and on the latter refusing he resigned his commission to form a cabinet. The King then sent for M. Tricoupis. On February 23rd, the latter failing to obtain a vote of confidence from the chamber, read a royal decree dissolving the chamber. In April the result of the elections was known to be in favour of the opposition, and on the 22nd M. Tricoupis resigned; two days afterwards M. Deliyannis accepted the task of forming a ministry. On May 2nd the announcement was made that the new cabinet was constituted, M. Deliyannis, the premier, taking charge of the portfolios of finance and (*ad interim*) foreign affairs. Immediately afterwards it was stated that sweeping changes in the direction of financial economy were to be made, including the recall of all the ministers abroad except the envoy at Constantinople. Greece took an active part in the Balkan ferment; early in October the reserves were called out, and general mobilisation was demanded at large popular gatherings. On January 11th, 1886, a circular was addressed to the powers by M. Deliyannis,

urging the claims of Greece, and pointing out that she had remained at peace for three months since the armament. It was stated a few days afterwards that Servia had proposed an alliance with Greece. The great Powers, however, subsequently insisted upon all the smaller states involved in the Balkan dispute disarming. M. Deliyannis' policy caused Greece to remain obdurate; and it being stated that she was about to issue letters of marque to privateers, Lord Salisbury (Jan. 23rd) sent a threat to order the British fleet to the Piræus. M. Deliyannis replied by ordering the Greek fleet to go to sea. The united fleet of the Powers, under the command of H.R.H. the Duke of Edinburgh, was sent to Suda Bay to enforce their demands for the disarmament of Greece; and on March 20th, the Greek government having convoked the Chamber for April 2nd, war, it is feared, is now imminent.

"Delorme, Joseph." See NOMS DE PLUME.

"Delta," Δ. See NOMS DE PLUME.

Deluge, The Chaldean Account of. See BIBLICAL ARCHÆOLOGY.

De-Mauley, Charles Frederick Ashley Cooper Ponsonby, 2nd Baron (creat. 1838); b. 1815; succeeded his father 1855. Was M.P. for Fode (1837-47), and for Dunbarvan (1851-52).

Democracy. The name "democracy" has come down to the modern world from ancient Hellas, in whose numerous republics the political situation was largely exemplified. It designates the political rule of the *Demos*, or the body of citizens, in contradistinction to monarchy or *tyranny*, the government of a single person, and to *aristocracy* or *oligarchy*, the dominant power of a class or of a select few representing a particular class. A perfect democracy is all but unknown to history. In the palmiest times of Greek popular government, a very large, indeed, the largest, section of the population—the slaves—were wholly excluded from part or lot in political affairs. Even the lower classes of Greek citizens not only did not always enjoy equal political advantages with the higher classes, but were positively often subject to serious political disabilities; although the progress of the democratic spirit operated continually towards the reduction of such inequalities. It is only in a small state or sovereign city that the whole body of citizens are in a position to exercise an equal voice in the government of the community. With the wide extension of territory the possibility of personal action in political affairs is seriously limited, and the principle of representation seems to be the necessary and only resource. From constant experience, we in England have the keenest appreciation of the restraints and complications of representative government, and of the hopes and fears attendant on every democratic concession wrung from non-democratic parliaments. With all deductions from the ideal, however, we have no difficulty in recognising the general determining force that makes for democratic supremacy. As a fair statement of "the recognised principles of political democracy," we may adopt the careful expression of **Sir Erskine May**. "The highest ideal of a democracy," says Sir Erskine ("Democracy in Europe," I. lxxiv.), "is that which secures to every citizen equality before the law, freedom of person, freedom in the family, freedom of conscience, freedom of opinion, freedom of speech, freedom of trade, freedom of labour, freedom of pro-

perty, freedom of action when not injurious to the state or to society, a share in the election of his rulers, and in the making of the laws by which he is governed, and in the voting of taxes which he is called upon to contribute; which provides that the enlightened will of the majority shall be the rule of all, while none shall be restrained but for the general good; which, combining the strength of a whole people, has for its first object security for the rights and liberties of every member of the state."—"There is no use mincing the matter," said **Mr. W. E. Forster**, in his address as Lord Rector of the University of Aberdeen (1876); "unless the world goes back, democracy must go forward. The will of the people must more and more prevail. We cannot prevent numbers ruling; we can only persuade them to rule well." As nations grow in intellect and expand in material development, the people claim an enlarged influence in government, and their claim must be acknowledged, however much the concessions may be practically limited from time to time. Many writers have investigated the conditions of advancing freedom, physical and social. **Montesquieu** has traced the influence of climate, soil, and geographical position; **Buckle** and **Taine** have also examined the influence of physical laws. The enervating sun disposes tropical peoples to a languid acquiescence in despotism; but "where snow falls, there is freedom." The mountains and the sea are champions of liberty. The mountains, even in hot countries, raise the population from the languid ease of the plains, and nourish an indomitable independence; the Swiss cantons may rank with the Greek republics in the vindication of political freedom. The sea quickens the spirit of adventure, of enterprise, of predominance: witness the shores of the Mediterranean, of the Ægean, of the Adriatic, of the Netherlands, and of England. Inland, too, the spread of an agricultural community joins with the activity of commerce and the free use of minerals in generating large towns for the supply of people's needs. And when men sharpen their intelligence in cities by the higher exercise of handicrafts, and by the rubbing together in social intercourse, the development of popular aspiration proceeds apace, and is gradually carried out into the country. "Throughout the wide range of history," as **Sir Erskine May** truly remarks,—"in Greece, in Italy, in France, in Spain, in Germany, in the Netherlands, and in England,—we find, in cities, the earliest and most memorable examples of freedom and self-government." The more the difficulties of local separation are overcome by means of railway, telegraph, telephone, and "cycle," the greater the triumphs of intelligence and freedom. The newspaper every morning is reaching more and more breakfast and supper tables, spreading the latest news from every corner of the wide world; and political associations in every village canvass in free discussion all the subjects of current interest. In view of such considerations (and many more might easily be added), the progress of democracy is a fact of very special interest to us here in England. The history of Eastern civilisation presents no examples of popular freedom. Even the village communities of India, which display most interesting and exceptional examples of local self-government, were bound down by the

merciless rule of ancient customs and of rigid caste, and betray only the slightest vestiges of liberty. The **Jews** (*q.v.*), alone of Eastern peoples, developed a high degree of popular freedom, amidst many adverse circumstances—a testimony to their quickness of intellect, and their religious and moral elevation. The **Aryans**, “the progenitors of the noblest and most conspicuous races of mankind,” were Asiatics; but they dwelt in cold northern regions, on the highest elevation of Central Asia. Their descendants in ancient Greece, under centuries of favourable influences, exhibited remarkable examples of popular interest in government. The germs of Athenian democracy are traced in the **Greek councils of war** before the walls of Troy, in the assembly of Telemachus in **Ithaca**, and in the public administration of justice in the **Homeric agora**. The natural configuration of Hellas tended to create a multitude of small political communities, and to foster in them a strong passion for freedom. The revolutions and convulsions which we read of were for the most part the struggles of democracy and oligarchy; but it is to **Athens** that we must look for the fullest development of democratic principles in Greece. The constitution of **Solon** was vastly expanded by the reforms of **Cleisthenes**, and these in turn were similarly extended by the reforms of **Pericles**. “By these successive measures,” says **Sir Erskine May**, “the constitution of Athens became a pure democracy. All citizens were equal; and in war, in politics, and in judicature, the people were supreme. They were the only source of power; all offices were open to them; the distribution of offices by lot placed high and low upon a level; payment for public services raised the poor to an equality with the rich; and even the public amusements were free to all alike. It is the first and most memorable example of a government in which popular power has been exercised directly, without any intermediate governing authority. So complete and direct was the sovereignty of the people, that ambassadors were received, not by any great officer of the state, but publicly by the **Assembly** itself. . . . The assembly combined executive functions with powers of legislation and judicature. It elected the civil and military officers of the state, and it determined questions of peace and war. Its range of powers and functions far exceeded that of the House of Commons.” Yet it did not prove the ruin of Athens. On the contrary, “during the period in which Athens was governed by a democracy, are recorded her greatest material prosperity, her most brilliant achievements in war, her ascendancy among the states of Greece, her ablest generals and statesmen, her most famous orators, philosophers, and historians, the highest development of her literature and arts, and the most extended cultivation of her people. Within this period are comprised the proudest memories and monuments of Athenian history.” And when Athens did fall, “she fell, not from internal dissensions, nor from the failure of her democratic institutions, but under the overpowering military force of **Macedon**.”—The course of history, in one of its most important aspects, reveals an all but continual struggle of the masses for freedom. Not only the **Romans**, but all the other states of ancient Italy, dismissed their kings and established annual magistrates in their place. Still the

institutions developed under monarchy largely determined the character of the succeeding republic; and the succession of great offices set up in republican Rome mark the successive stages of the rescue of aristocratic privilege from the steady advance of democratic influence. But the Roman republic was, after all, a very restricted democracy, and the nobles, when they ceased to rule by right of birth, contrived to rule by union and by force of wealth. The vast extension of Roman territory by conquest gave scope to plundering provincial governors, who meant to fill their coffers for the corruption of the people in Rome. **Professor Freeman** is probably right when he says that “a representative system would have delivered Rome from the fearful choice which she had to make between anarchy and despotism”; it would at least have helped to control the unbridled ambition of unscrupulous soldiers, and to ameliorate the social conditions of the state, which were the main cause of the fall of the republic. The **early Italian republics** confirm the value of political freedom. “Their citizens may fitly be compared with their renowned prototypes of ancient Greece and Italy. They transmitted few great names, indeed; and history has not rescued their achievements from oblivion; but they have left monuments of their greatness and public spirit, not unworthy of comparison with the immortal memorials of antiquity. All that is great in the intellect and arts of Italy is associated with the history of her freedom.”—While the Italians and the Greeks ruined themselves by division, the Swiss cantons have drawn permanent strength and liberty from constant union. The league of three Forest Cantons was the origin of the **Swiss Confederation**. “It was the simplest form of democracy recorded in the history of the world. Without the intervention of chiefs, or priests,” says **Sir Erskine May**, “the hardy mountaineers assembled in the open air, made laws for their own government, and swore to observe them. These assemblies were as primitive as those of the **ancient Germans** described by **Tacitus**; and they were far more free. They met, not at the bidding of kings and chiefs, nor to give assent to their counsels; but as equals, having common rights and interests in their beloved canton. Such a gathering, with less pretensions than the assembly of a Greek city, represented an agricultural democracy, such as **Aristotle** commended. Yet each of these forest cantons was an independent state, having its own laws, entering into treaties of alliance, and sending forth its armed men to battle. Famous in the Middle Ages for their simple customs, these little cantons remain to the present day examples of a pure democracy, such as poets might imagine and speculative philosophers design. It affords a rare study in politics: it stands alone, and unapproachable.” The **referendum** is also a remarkable principle in Swiss legislation. “As society advanced, and the administration of affairs was intrusted to senates and councils, the reference of important questions to assemblies of the people was still recognised, and a traditional right was asserted of reserving such questions for their final determination.” All laws passed by the Federal Assembly must, on demand of 30,000 qualified citizens, be submitted to the popular vote; and in several of the cantons, the cantonal legislation is inoperative until it receives the con-

ment of the people: a serious inroad on the theory of representation.—The peculiar manifestations of democracy in France and in America have been very frequently held up to Englishmen as warnings. The Americans had the advantage of starting democratic institutions on a tolerably clear foundation—with much monarchical bias, no doubt, but also with considerable repulsion. Yet the political life of America is admittedly very corrupt, and (unless at the time of the presidential election) very apathetic; the best men and the ablest men admittedly stand aloof from a political career. No doubt there is danger in this; although it arises, as asserted, in great measure from the very confidence of the people in the stability and soundness of their institutions, and in their ability to rectify with promptitude and certainty whatever may happen to go seriously wrong. With the weaknesses of American democracy in full view, many writers laud it as nevertheless the highest example of democratic government; they point to the multiplied provision that has been made, in response to the demands of experience, for the strengthening of every weak place that has developed in the working of the mighty and complicated system. Sir Henry Maine has just felt constrained to admit that the history of American institutions has proved that Democracy may be made tolerable. If there are weaknesses more dangerous than others in the American constitution, they lie in the closest connection with points that have been too faithfully copied from its great exemplar in England. There is nothing more perilous than the **Presidential system**—the actual position and powers of the President, the mode of election, and the parasitical growths of demoralised electioneering that have now acquired strength to dominate all parties. There is something radically wrong in a system that could place in the presidential chair an Andrew Johnson, or a high-handed despot like Rutherford Hayes, or even a strong man like Abraham Lincoln, by the accident of a mere minority vote. But when we separate from the essential principle of democracy the accidental examples of misapplication and of unfortunate circumstances, it is impossible to deny that the experience of America is calculated to strengthen faith in democratic institutions, while awakening patriotic citizens to look to the weak links in the organisation.—The example of France is very different indeed. The bloody excesses of the Revolution are fully exhibited to us, but we seldom hear an exposition of the causes that preceded and justified (if anything could justify) those fierce reprisals—the overthrow of intolerable oppression. If the French Republic quickly fell away into despotism, this fact is not to be charged against democracy. There was no possible alternative. The blame lies with the preceding monarchical *régime*, which had laboured for centuries to consummate the centralisation of the government and administration; and when this central authority was overthrown, and the Republic succeeded to its place, there was no organisation whereby it could efficiently carry out its principles of government, and there was no breathing-space to develop a basis of popular support. Such a basis has grown gradually since then, in spite of vigorous discouragements. There can be no question that the French Revolution, with all its regret-

table accompaniments, has proved the greatest force of modern history in bursting the bonds that fettered the individual action and the mental expansion of the common people in all the countries of the West. The history of France has abundant warnings for democratic experimentalists. The earliest glimpses of English history disclose a simple and democratic state of society, which was soon eclipsed by military predominance. The weakening and the overthrow of the **Feudal system** (*q.v.*) by the upgrowth of commercial cities, the expansion of guilds, the development of manifold industries, and the multiplication of citizens interested in the smallest patches of land, involved a long process of popular elevation and combination. The historical circumstances developed a balance of king, aristocracy, and commons, which was trimmed with exceeding care by all parties, but which the forces of modern society are gradually modifying. Mr. Frederic Harrison has just expressed the position with clear appreciation. "The last Reform Act and the events of the last few years have made this country as near an approach to simple democracy as any perhaps in Europe. England now occupies a place almost unique in history. She has virtually, and in effect, though not avowedly, cast off her old political system, and yet has not consciously adopted any other. Our constitution is in a state more undefined, more fluid, more elastic than almost any constitution in the world. There are more open spaces and unknown regions in it than in any, and there are fewer recognised obstacles in the way of any conceivable organic change. The English democratic republic is wholly without those organic resources for stable government which all republics, and especially democratic republics, have sought. The English constitution of 1688 bristled with such resources; so does the constitution of the United States; so does the constitution of the French Republic. We have discarded all of them, and we have put nothing whatever in their place. We have nothing at all resembling the old balance of the constitution. . . . From the ministry of Walpole in 1721 down to 1884, the House of Commons was in the main, and with some intervals, the true centre of force; but it was itself really controlled by a large, elastic, and essentially bourgeois aristocracy. Last year the remaining means of working that control were surrendered, and for the first time in our history, almost for the first time in modern history, the labouring masses of the people have been invested with almost absolute control over the entire destinies of our country and our empire. It perhaps has never before occurred, at least in this century, that in the sovereign assembly of a great empire twelve men of the working class, men sent especially to represent the working classes, had taken their seats." It is as true now as when De Toqueville wrote it, that "in no country in the world is the love of property more active, and more anxious, than in the United States,—nowhere does the majority display less inclination for those principles which threaten to alter, in whatever manner, the laws of property;" it is unquestionable that the small landholders of France constitute one of the strongest conservative influences in the country. We repeat Mr. Forster's remark: "We cannot prevent numbers ruling; we can only persuade them to rule well." Fortunately their temper is all in favour of ruling well.

They have in many cases shown remarkable discrimination and political virtue in refusing to return incompetent and untrustworthy candidates, whatever their professions, at the recent election; as well as in repudiating the dictation of outside cliques as to what candidates they should choose. There is an undeniable preference for gentlemen of ability and knowledge and prudent conduct. Candidates must address themselves worthily to the intellect and the conscience of the constituencies; and even working-men candidates, unless really strong and useful, and unquestionably honest politicians, are regarded with decided disfavour. **Mr. F. Harrison** justly observes: "The intelligent co-operation of the whole people is now the corner-stone of any healthy government, the condition precedent of all free and progressive communities." The safety of the state depends on the wise direction of the forces of democracy—on the timely and honest education of the people, and their fair treatment. The safety of the democracy is in exact proportion to the free development of the true democratic principle.

Democrats, German. See GERMAN POLITICAL PARTIES.

Denbigh, Rudolph William Basil Feilding, 8th Earl of (creat. 1622); b. 1823; succeeded his father 1865. The 1st Earl was an active supporter of Charles I., while his son was equally energetic on the side of Cromwell. The family claims descent from the Counts of Hapsburg, and thus is connected with the House of Austria. The celebrated Henry Feilding was grand-nephew of the 3rd Earl.

Denison, Mr. Ernest William, M.P., was b. 1856. Educated at Eton and Cambridge. He is a banker at Leeds. Returned in the Conservative interest as member for Whitby Division, North Riding (1885).

Denison, Mr. William Beckett, M.P., was b. 1826. Educated at Rugby and Trin. Coll., Cambridge. Deputy Lieutenant and J.P. for the West Riding of Yorkshire. Formerly captain Yorkshire Hussars. Principal of the banking firm of Beckett and Co., Yorkshire and Notts, and President of the English Country Bankers' Assoc. Returned in the Conservative interest as member for East Retford (1876-80); Bassetlaw Division of Notts (1885).

Denman, Thomas Aitchison - Denman, 2nd Baron (creat. 1834); b. 1805; succeeded his father 1854. He was associate to his father when Chief Justice of the Queen's Bench. The 1st peer was for eighteen years Chief Justice of the Queen's Bench, and was well known for his exertions in favour of the Queen of George IV., to whom he was Solicitor-General.

Denmark. Kingdom under Christian IX., of Glücksburg. By charter of 1849 (modified in 1855, 1863, and 1865) the executive power is vested in king and ministers, the legislative in the Rigsdag or Diet jointly with the sovereign. The Rigsdag is composed of the Landsting (or Upper House of 66 members; 12 crown nominees, and 54 indirectly elected by the people for eight years), and of the Folksting (or House of Commons of 102 members directly elected by universal suffrage for three years). The Rigsdag must meet every October, and all money bills be submitted to the Folksting. Colonies comprise Iceland (which has its own constitution and assembly of 36 members, with a minister nominated by the king), the

Faroe Islands, Greenland, and three small West Indian Islands. The state religion is Lutheran, but all others are tolerated, and there are no civil disabilities to dissenters. Revenue, 1884-5, £2,984,000; expenditure, £2,611,000; national debt, £11,130,000, but state investments amount to £5,000,000, reducing debt nearly one-half; army in peace 35,000, in war 50,000; navy consists of 8 armourclads and 32 other vessels; area, 13,784 square miles; pop. about 2,000,000.—1870. Remained neutral in Franco-German war. Ministry under Holstemborg formed in May. In December 1871, Folksting reduced military items in budget. Ministers defeated, December 1873, by communist party in Folksting. New ministry formed by Fønnesbeck in July 1874. Several ministerial changes, and in June 1875 Estrup became premier. Radical party defeated ministers on the Fortification Bill, and the assembly was dissolved. New assembly met in May 1876. A vote of want of confidence in ministry was passed, and contest lasted till April 1877, when session closed without budget being voted, provision in accordance with constitution for raising supplies being made by the king. A compromise was agreed to (Nov. 1877).—1879. General election for Folksting resulted in increase of the ministerial majority. In January Austria agreed to the repeal by Prussia of the fifth article of treaty of Prague as to North Schleswig. A treaty made with Sweden, guaranteeing free navigation of Sound to both (Aug. 8th).—1880. Bills providing for considerable increase in army and navy passed in July. In August the Zealand railways were purchased by the state; new railways approved.—1881. Budget amended by Folksting, and restored to original form by Landsting at the instance of the government. On former adhering to its view, the Rigsdag was dissolved. New elections in May did not alter the strength of the opposed parties, and it was agreed to pass a temporary budget, the Rigsdag being again dissolved in July. On the new elections the radical party had increased, and the budget was passed by Folksting in the same form, but was rejected by the Landsting as before; the Rigsdag was accordingly prorogued. In May 1882, however, the matter was settled by a compromise, the new elections having left parties in upper house as before but with slight increase in the radical majority in the lower house.—1883. Dispute between Estrup's ministry and Folksting renewed. The passage of the budget was the only business done. A Prussian edict was promulgated requiring all Danish subjects to register: their names on rolls of district or leave the country; and during 1884 much persecution was directed against Danes in North Schleswig.—1884. Legislative work still continued at a standstill. An attempt to pass a temporary budget was defeated, and the Government reluctantly accepted the general budget as amended by lower house.—1885. The same division between the houses continued as here before, and the budget was in October rejected by a large majority. On the 21st an attempt was made by a private person to assassinate Estrup. The marriage of Prince Waldemar with the daughter of the Duke de Chartres took place. Agitation against personal government and counter-conservative demonstrations took place in November. A large increase in the police ordered by the King, and an order made by him on the treasury for the expense. A pro

visional law punishing with imprisonment persons speaking or writing against the authorities was also promulgated on November 2nd, and a member of Folksting convicted under it on the 24th. On the 14th a commercial crisis, panic on exchange, and large failures in the corn trade took place. The provisional law promulgated in October by Government restricting liberty of press and public meeting, and establishing corps of gendarmes, such law being contrary to Constitution, was discussed in the Folksting, and negated by an overwhelming majority. On January 23rd, 1886, the Speaker was sentenced to imprisonment for alleged resistance to police at a political meeting; the sentence was, however, set aside by the superior court. On February 7th the Folksting protested against the decrees of the Government, and declared all acts resulting therefrom to be illegal; but on the same day the King closed the Riksdag, and on March 26th issued a royal decree establishing the budget for 1886-87, the Folksting having refused to discuss the financial bills brought forward by the Government. The ministry is empowered by this decree to levy the existing taxes and incur the necessary expenditure, but not to exceed the sum fixed by the budget.

Dennis, W. See FIRE EXTINCTION.

Département. (From the French.) One of the principal territorial divisions of France under the administration of a prefect (*prefet*), who is the head representative of the Government. The administrative seat of a prefect is called *préfecture*, and is always situated in the capital town of the *département*. A *département* is subdivided into *arrondissements* (districts). A French *département* is like an English county.

Depretis, Signor Augustin; b. in 1811, at Stradella, in Piedmont. Educated in the University of Turin, and became proficient in knowledge of jurisprudence. He contributed to the columns of Piedmontese journals, and actively advocated the unity and independence of Italy. After the troubles of 1848 he was Civil Governor of Brescia (1849). In 1850 he became a member of the Piedmontese parliament. Cavour appointed him Pro-dictator of Sicily (1861), and in August of that year he proclaimed the new Italian Constitution. He held various posts in the ministries of Ratazzi (1862) and Ricasoli (1866). In 1876 he became Minister of Finance and President of the Council, when he inaugurated various important reforms. In 1877 he was for a short time replaced by Signor Cairoli. Since 1881 he has been in power.

Deranmore, Thomas Bateson, 1st Baron (creat. 1885), was b. 1819. Formerly M.P. for Londonderry, also for Devizes. Lord of the Treasury (1852) in the Derby administration.

Derby, Edward Henry Stanley, P.C., 15th Earl of (creat. 1885); K.G. (1884); b. 1826; succeeded his father 1869. Educated at Rugby, and at Trinity College, Cambridge, where he was 1st class in classics (1848), taking also mathematical honours; was made LL.D. at Cambridge (1862). Was M.P. for Lynn Regis (Dec. 1848 to Oct. 1869); was an unsuccessful candidate for Marylebone (May 1859), and for Lancaster (March 1848). Elected Lord Rector of Glasgow University (1869); Lord Rector of Edinburgh University (1874). Was Under-Secretary of State for Foreign Affairs (March to Dec. 1852); Secretary of State for the Colonies

(Feb. 1858), and "Her Majesty's Commissioner for the Affairs of India" (May 1858); Secretary of State for India and President of the Council of India (Aug. 1858 to June 1859); Secretary of State for Foreign Affairs (June 1866 to Dec. 1868, and Feb. 1874 to April 1878); Secretary of State for the Colonies (1882-5). The 14th Earl was Prime Minister.

Derby Stakes. See RACING.

Derby Winners 1831-1885.

1831. Spaniel.	1859. Musjid.
1832. St. Giles.	1860. Thornaby.
1833. Dangerous.	1861. Kettledrum.
1834. Plenipotentiary.	1862. Caractacus.
1835. Mundig.	1863. Macaroni.
1836. Bay Middleton.	1864. Blair Athol.
1837. Phosphorus.	1865. Gladiateur.
1838. Amato.	1866. Lord Lyon.
1839. Bloomsbury.	1867. Hermit.
1840. Little Wonder.	1868. Blue Gown.
1841. Coronation.	1869. Pretender.
1841. Attila.	1870. Kingcraft.
1843. Cotherstone.	1871. Favonius.
1844. Orlando.	1872. Cremorne.
1845. Merry Monarch.	1873. Doncaster.
1846. Pyrrhus the 1st.	1874. Geo. Frederick.
1847. Cossack.	1875. Galopin.
1848. Surplice.	1876. Kisber.
1849. Flying Dutchman.	1877. Silvio.
1850. Voltigeur.	1878. Sefton.
1851. Teddington.	1879. Sir Bevis.
1852. Daniel O'Rourke.	1880. Bend Or.
1853. West Australian.	1881. Iroquois.
1854. Andover.	1882. Shotover.
1855. Wild Dayrell.	1883. St. Blaise.
1856. Ellington.	1884. { "St. Gatien.
1857. Blink Bonny.	{ "Harvester.
1858. Beadsman.	1885. Melton.

* Dead heat.

De-Ros, Dudley Charles Fitzgerald de-Ros, 24th Baron (creat. 1264); b. 1827; succeeded his father 1874. Was Equerry to the late Prince Consort; appointed Extra Equerry to the Queen (1862); Equerry in ordinary (1868); a Lord-in-waiting to the Queen (Feb. 1874 to May 1880); reappointed (June 1885). The 1st Baron was summoned to the parliament called by the Barons when Henry III. and his son Prince Edward became prisoners.

Derwent, Harcourt Vanden Bempde Johnstone, 1st Baron (creat. 1881); b. 1829. Sat as M.P. for Scarborough (1869-80).

De Saumarez, John St. Vincent Saumarez, 3rd Baron (creat. 1831); b. 1806; succeeded his brother 1863. The 1st peer was the celebrated Admiral Saumarez.

Deseret. See MORMONISM.

Des Vœux, Sir George William, K.C.M.G. recently appointed (1886) to the post of Governor and Commander-in-chief of Newfoundland, in the place of the late Sir John H. Glover, was b. 1834. Educated at the Charterhouse and at Balliol Coll., Oxford. Called to the bar of Upper Canada (1861). Stipendiary magistrate in British Guiana (1863-69); Administrator of the Government and Colonial Secretary of St. Lucia (1869); Lieutenant-Governor of Trinidad (1877); Acting Governor of the Fiji Islands (1878); Governor and Commander-in-chief of the Bahamas (1880); Governor and Commander-in-chief of the Fiji Islands (1880-86).

De-Tabley, George Warren, P.C., 2nd Baron (creat. 1826); b. 1811; succeeded his father 1827.

De Torqueville and Democracy. See DEMOCRACY.

Deutsche Bank. See CHINESE LOAN, NEW.
Deutsche Freisinnige. See GERMAN POLITICAL PARTIES.

Deveria. See EGYPTOLOGY.
De Vesci, John Robert William Vesey, 4th Viscount (creat. 1776); Baron de Vesci (1884), by which last title he holds his seat in the House of Lords; b. 1844; succeeded his father 1875. Lord De Vesci's name has been brought recently (March 1866) into prominence by the correspondence on Home Rule between Mr. Gladstone and his lordship.

Devon, William Reginald Courtenay, P.C., 11th Earl of (creat. 1553); b. 1807; succeeded his father 1859. Obtained a fellowship at All Souls'. Was M.P. for South Devon (1841-49). President of the Poor Law Board (May 1867 to Dec. 1868).

Devonian. See GEOLOGY.
Devonshire, William Cavendish, P.C., F.R.S., D.C.L., 7th Duke of (creat. 1694); b. 1808; succeeded his grandfather in 1834 in the earldom of Burlington and the barony of Cavendish (United Kingdom), and succeeded his cousin in the other honours (1858). Educated at Trinity College, Cambridge; was second wrangler and Smith's prizeman (1829); was Chancellor of the University of London (1836-56); appointed Chancellor of the University of Cambridge (1862). Was M.P. for the University of Cambridge (1829-30); lost his election there in 1831, but was returned for Malton; sat for North Derbyshire (1832-34).

Devotion, Days of. See DAYS OF DEVOTION.
De Worms, Baron. See WORMS.

Dewsbury. See WASTE MATERIALS.

Dextrose. See POLARISCOPE.

Dick, W. B. See FIRE EXTINCTION.

Dickson, Major Alexander George, M.P., of Glenham Hall, Wickham Market, was b. 1834. Educated at Rugby. Entered the army (1853) in the 13th Dragoons, serving in the Crimea in the 62nd Foot (1854-5), and in India with the Carabineers (1857). Is Deputy Chairman of the Crystal Palace Company, and a director of the London, Chatham, and Dover Railway. Married (1861) Charlotte Maria, widow of the late Lord North. Returned in the Conservative interest as member for Dover (1865-85); re-elected 1885.

Digby, Edward St. Vincent Digby, 9th Baron (creat. 1765); b. 1809; succeeded his cousin the 2nd Earl of Digby in his Irish barony in 1856.

Digby, Mr. Grant. See IRVING, HENRY.

Digby, Mr. W. See INDIAN DELEGATES.

Digna, Osman. See SOUDAN.

Dilke, Sir Charles, P.C., M.P., b. at Chelsea, September 4th, 1843; he graduated at Cambridge in January 1866, and later in the same year was called to the bar. From 1866 to 1868 he was engaged in making a tour round the world. His parliamentary career dates from 1868, when returning from his tour, he was elected for the then newly formed borough of Chelsea, defeating the celebrated war correspondent, Dr. W. H. Russell. He has held that seat ever since (1874-80, and 1885). Soon after entering the House, he created a stir by his attack on the civil list. Sir Charles' rise in the House has been steady and certain almost from first to last. He lived down the anger caused by his speech concerning the civil list, and by adopting a more moderate tone has succeeded in making himself one of the most effective speakers of the House. He made the question of unrepresented corporations one of his

studies, and supported Mr. Trevelyan's proposal for the county franchise, since become law. He is also, in conjunction with other members of the advanced Liberal party, an opponent of the proposed Home Rule Government for Ireland. Sir Charles for some time was responsible editor of the *Athenæum*, of which paper is the proprietor, as he is also of *Notes and Queries*. As an author, his principal work is "*Greater Britain*," written after his tour, besides other volumes, of which "*Prince Florestan Morocco*" is the most notable.

Dillon, Mr. John, M.P., L.R.C.S.I., was b. 1851. Educated at the Catholic University Dublin. Returned as Nationalist for Tipperary (1880), but owing to ill health resigned the seat. Elected for East Mayo (1885).

Dillwyn, Mr. Lewis, M.P., F.G.S., F.L.S., was b. 1814. Educated at Bath. Is Deputy Lieutenant and J.P. for Glamorganshire. Commandant 3rd Glamorganshire Rifle Volunteers. A Director of the Great Western Railway Co. and of the Glamorganshire Banking Co. Returned in the Liberal interest as member for Swansea (1855-85); re-elected 1885.

Dimorphism (from *duo* = two, *morphe* = form). A term used (1) in chemistry (2) in botany. In each case the word denotes twofold form in the same body, but with very different significations in the two sciences. I. **Chemistry.** A dimorphic substance is defined as that, having the same chemical composition, crystallises in more than one form. The two crystalline forms (or the three in the rare cases of trimorphism) may belong to the same one of the various systems of crystals and may have differences in their corresponding angles or they may actually belong to two or three different systems. These differences of form with identity of chemical composition are generally of chemical properties, are associated with differences in physical properties, such as specific gravity, colour, and hardness. The nature of the liquid from which the dimorphic body crystallises out, and above all the temperature, affect the shape of the crystals formed. **Examples of dimorphism are, among elements:** carbon (in its two forms, graphite and diamond), sulphur, phosphorus, arsenic, antimony, bismuth, copper, perhaps iron; among compounds: oxides of copper (cuprous), lead arsenic, arsenious oxide or "white arsenic" of the shops, sulphides of copper and iron (cuprous and cupric), iodides of potassium and mercury chloride of ammonium (sal ammoniac), calcium carbonate (Iceland spar and aragonite), potassium nitrate (nitre), zinc sulphate, magnesium sulphate, lead chromate. Trimorphous—nickel sulphate. II. **Botany.** A dimorphous flower is one in which the reproductive organs are of two sets of lengths. The male, or stamens, are either long or short. The styles of the female or of the carpels, are either short or long. In any given flower the stamens and styles are of different lengths. Thus, flower A of the particular plant will have, say, long stamens and short style; flower B will have, say, short stamens and long style. The name *heterostylism* (*heteros* = different) has been used as synonymous with dimorphism. The plants of the genera *primula* (primrose, cow slip) and *linum* (flax) are the best examples of dimorphism. Trimorphic plants have flower with three lengths of stamens and three lengths of styles. In any given flower two of these lengths are represented by two different sets of

stamens, the third length by the style or styles. Thus, flower A of a particular plant has, say, long and medium stamens with a short style; flower B, medium and short stamens with a long style; flower C, short and long stamens with a medium stle. The plants of the genera *Lythrum* (loose-strife) and *Oxalis* (wood-sorrel) are the best examples of trimorphism. **Hildebrand** and **Charles Darwin** were the investigators who established these facts. Darwin especially showed that the best arrangement for the plant was when the ovules of a flower with style of a given length were fertilised by pollen from stamens of the same length. From these "**legitimate unions**" between pollen from long, medium, or short stamens, and the ovules of long, medium, or short-styled flowers, arose offspring more in number, stronger, and bearing more seeds than those resulting from "**illegitimate unions**" between plants having stamens and styles of the same length. It is obvious that to have a "legitimate union," and therefore to obtain the result best for the plant in the struggle for life, **cross fertilisation** must occur.

Dimsdale, Baron, M.P., was b. 1828. Educated at Eton and Corpus Christi Coll., Oxford. Is Deputy Chairman of Quarter Sessions for the Hertford Division, and is President of the Herts Chamber of Agriculture. Returned in the Conservative interest as member for North Hertfordshire (1885).

Diocesan Courts. Ecclesiastical courts for exercising general jurisdiction in diocesan affairs. They consist of the Consistory Courts, the Courts of Commissaries, and the Courts of Archdeacons (see **ARCHDEACONS**).

"**Dioscorides.**" See **NOMS DE PLUME**.

Dipsomania (thirst madness) is a form of insanity, causing a morbid craving for stimulants. It may be produced by previous habits of intemperance, but is seldom the result of this alone, being often of hereditary origin, or in consequence of sunstroke, or from injury to or structural disease of the brain. **Dipsomania** differs from habitual drunkenness in the attacks or periods of craving having intervals of remission, during which its victim may seem to completely lose his morbid desire and express himself confident to withstand temptation. Repeated attacks, however, produce permanent degradation of all moral sense, and not unfrequently lead to a state of dementia. The only treatment likely to produce any good result is prolonged residence in some institution where total abstinence is enforced, tonic treatment and healthful occupation provided. Such homes are now established (licensed under the Habitual Drunkards Act of 1879, introduced by Mr. Dalrymple), where, with the patient's own consent, he can be treated; the morbid tendency is seldom, however, permanently eradicated.

Disbarring. The expulsion of a barrister from his Inn of Court. The Inns of Court were established and are continued by voluntary association, for the purpose of affording facilities for the study and practice of the law. But any person wishing to be called to the bar must become a member of some Inn of Court, and can practise only so long as he continues a member. The governing body of each Inn, the Bench, has jurisdiction to expel a member for misconduct, and so to prevent him from any longer practising; and thus he is **disbarr'd**. If he is a benchers as

well as a barrister, he is, on expulsion, both disbenched and **disbarr'd**. The Bench of an Inn of Court is in no way restrained in the exercise of this jurisdiction, except by the **disbarr'd** person's right of appeal to the Judges.

Discount Bank of Berlin. See **CHINESE LOAN, NEW GREAT**.

Disentail. See **LAND QUESTION, THE**.

Disestablishment. While the State does not concern itself about the affairs of other religious bodies, the Churches of England and Scotland are national church establishments; and **disestablishment** means the placing of them on exactly the same footing, as regards the laws and government of the country, as those other bodies. The Protestant Episcopal Church in Ireland was established at one period, but was **disestablished** by an Act of Parliament passed in 1869. The advocates of **disestablishment** object to church establishments because (1) the national legislature, which represents everybody, ought not to confer privileges on particular religious bodies, and thereby to create religious inequality; (2) because Parliament is an unfit body to deal with the affairs of churches, and cannot do so compatibly with its other duties; (3) because established churches being necessarily subject to state-control, cannot possess the liberty required to adapt their operations to changing circumstances; (4) because establishments obstruct political and social reforms, waste much national property by applying it in an ineffectual way, and also injure religion by associating it with injustice, and occasioning discontent and division. It is further alleged that the steps already taken towards religious equality and **disestablishment**—such as Catholic emancipation, the admission of Jews to Parliament, the abolition of compulsory church rates, the admission of Dissenters to the national universities, and the legalisation of Nonconformist burial services in churchyards—have all had a distinctly beneficial effect; and that as Parliament has thrown the established churches more and more on their own resources their activity and usefulness have greatly increased. On the other hand, those who object to **disestablishment**, while they acknowledge that it would be objectionable to set up establishments now for the first time, assert that the amount of good which they effect justifies their continued existence; that **disestablishment** would be very difficult, and would be injurious to the State; while **disendowment**, which, it is admitted, must accompany **disestablishment**, would seriously cripple the resources of the churches. With regard to **disendowment**, it should be stated that the advocates of **disestablishment** propose to scrupulously respect all existing life interests, and also to leave the **disestablished** churches in possession of the buildings and endowments which have been the result of their own liberality during the last sixty years. At the general election of 1885 the number of candidates pledged to the principle of **disestablishment** was unprecedentedly large. The organisation which is most closely identified with the **disestablishment** movement is popularly known as "**The Liberation Society**," its full title being **The Society for the Liberation of Religion from State Patronage and Control**. It was founded in the year 1844, under the title of **The British Anti-State-Church Association**, that title having been

changed in 1853. Its chief office and dépôt for publications is 2, Serjeant's Inn, Fleet Street, Secretaries, Mr. John Fisher and Mr. Sydney Robjohns. (For list of members of present House of Commons in favour of Disestablishment see APPENDIX). On the other side **The Church Defence Institution** is organised for defence of the Church (9, Bridge Street, Westminster, S.W.).

***Dissenting Report of City Companies.** See CITY GUILDS.

Dissipation of Energy. The various forms of energy with which we are acquainted come from the different sources of (1) energy of uncombined elements, (2) solar radiation, (3) energy of the earth's rotation about its axis, and (4) the internal heat of the earth. All the different forms in which this energy exists are capable of being entirely converted into heat. We cannot, however, convert a given quantity of heat entirely into mechanical work or some other form of useful energy. There is, therefore, a tendency for all energy to run down into less available forms, and so become **degraded** or **dissipated** into the form of heat. Heat tends to diffuse itself uniformly by conduction and radiation throughout all matter, until it acquires the same temperature. Under the present condition of things, then, every form of physical energy is slowly passing into the state of heat, and this heat will be so diffused that the whole universe will be at the same temperature, and all physical phenomena must necessarily finally cease. (See also ENERGY, CONSERVATION OF, and MECHANICAL THEORY OF HEAT.)

Dissolution of Estates Bill. See WOMEN'S RIGHTS.

Distillers, The Worshipful Company of. See CITY GUILDS, THE.

Distribution, Statute of. See HOTCHPOT. **Dittrich, Prof.** See OLD CATHOLICS.

Divorce. Previous to the year 1857 all matrimonial suits came before the ecclesiastical courts. But a divorce could only be obtained by means of a private Act of Parliament, the expense and trouble of obtaining which made divorce a luxury of the opulent. By the Act 20 and 21 Vict., c. 85, there was established a civil court, entitled the Court for Divorce and Matrimonial Causes, since absorbed into the Probate, Divorce, and Admiralty Division of the High Court of Justice. The Act provides that a petition for dissolution of marriage may be lawfully presented to this court by the husband on the ground that his wife has been guilty of adultery; by the wife on the ground that her husband has been guilty of incestuous adultery, bigamy with adultery, rape, unnatural crime; or of adultery coupled either with such cruelty as would by itself entitle her to a judicial separation, or with desertion for two years or upwards. If the husband be petitioner he must, unless specially excused by the court from so doing, make the alleged adulterer a co-respondent. The petitioner, whether husband or wife, must prove that there has been no collusion on his or her part. The husband may, in a petition for dissolution of marriage, claim damages from the adulterer; and the court has power to direct in what manner the damages given should be applied. It may also order the adulterer to pay the costs of the proceedings, in whole or in part. The court may order the husband to provide for the wife by securing to her either a gross sum or an annual allowance, or monthly or weekly payments, and

may make his doing so a condition of its decree. It may also make such orders with respect to the custody of the children of the dissolved marriage, and with reference to any property secured by settlements made before or after such marriage, as it may think proper. A decree for a divorce is always in the first instance a *decree nisi* (*q.v.*), and cannot be made absolute until three months have elapsed from the time of pronouncing it. During this period any person is at liberty in the proper manner to show cause why it should not be made absolute, or to give information to the Queen's Proctor of any fact material to the case. The Queen's Proctor thus informed, and having reason to suspect that the parties to the suit have been acting in collusion, may, under the direction of the Attorney-General, and by leave of the court, intervene in the suit. The parties, or either of them, may insist on having the contested matters of fact tried by a jury. The damages to be obtained by a husband must always be assessed by a jury.

Dixon, Mr. George, M.P., was b. 1820. Mayor of Birmingham (1866), becoming afterwards a prominent member of the National League. Chairman of the Birmingham School Board (1876). Returned in the Liberal interest as member for Birmingham (1869-76); re-elected, Edgbaston Division (1885).

Dixon-Hartland, Mr. Frederick, M.P., F.S.A., was b. at Evesham 1832. Educated at Cheltenham Coll. Connected with the firm of Messrs. Lacy, Hartland, and Co., bankers, London. J.P. for Gloucestershire and Worcestershire. Returned as Conservative member for Evesham (1880-85); Uxbridge (1885).

Dobrukscha. A slice of Turkey, at the mouth of the Danube, which was bestowed in 1878 by Russia upon Roumania as a set-off for the Bessarabian district on the opposite side of the river, wrested by the Czar from that kingdom. The country is flat and marshy, and its acquisition implied a loss rather than a gain to Roumania.

Dodds, Mr. Joseph, M.P., was b. near Gainford-on-Tees, and settled at Stockton (1841). Mr. Dodds is a solicitor and chief clerk to the Tees Conservancy Commissioners, and a Deputy Lieutenant of Durham, and held the office of Mayor of Stockton (1857-8). Returned in the Liberal interest as member for Stockton (1865-85); re-elected 1885.

Dohona. See RED SEA LITTORAL.

Döllinger, Dr. See OLD CATHOLICS.

Dolmens. See ANIMISM.

Doncaster, Earl of. See BUCCLEUCH.

Doncaster Meeting. See RACING.

Donegall, Rev. Edward Chichester, 4th Marq. of (creat. 1791); Baron Fisherwick (1790), by which title he holds his seat in the House of Lords; was b. 1799; succeeded his bro. 1883. **Doneraile, Hayes St. Leger, 4th Visc.** (creat. 1785), was b. 1818, succeeded to the peerage 1854. Irish representative peer.

Donington, Charles Frederick Abney-Hastings, 1st Baron (creat. 1880); was b. 1822.

Donizetti, Gaetano, who shares with Bellini and Rossini the highest honours of the Italian opera stage, was born at Bergamo in 1797, and studied at Naples. He began very early to write operas, but his first great success was with "*Anna Bolena*" in 1830. This was followed by the graceful and popular "*L'Elisire d'Amore*" (Milan, 1832), the favourite "*Lucrezia Borgia*" (Milan, 1834), and the still more favourite "*Lucia*

ammermoor" (Naples, 1835), etc. Donizetti into melancholy towards the close of his life and died at his native place in 1848.

Donkin, Mr. Richard, S., M.P., is connected with the firm of Nelson, Donkin, and Co., shipbuilders, of Newcastle and London. Member of the Chamber of Shipping. Returned in the mercantile interest as member for Tyne and Wear (1885).

Donoughmore, John Luke George Hely-Ington, 5th Earl (creat. 1800); Viscount Donoughmore (1821), by which title he holds his seat in the House of Lords; was b. 1848; succeeded his father 1866.

Donnybrook Book of Canaan. See BIBLICAL ARCHAEOLOGY.

Dorchester, Dudley Wilmot Carleton, 4th Baron (creat. 1786); was b. 1822; succeeded his father 1875. Served in the Crimean campaign, and at the siege and fall of Sebastopol; received a medal and two clasps for his services.

Dormer, John Baptiste Joseph Dormer, 1st Baron (creat. 1615); was b. 1830; succeeded his father 1871.

Dorn, Justus. See NOMS DE PLUME.

Double Standard of Value. See BIMETALLISM.

Dover. See CINQUE PORTS and CHANNEL.

Dover, Baron. See CLIFDEN, HENRY G.

Downton College of Agriculture. See AGRICULTURAL COLLEGES.

Drama, The. The history of the stage during the year 1885 has not been particularly brilliant, either as regards the number of original plays by native authors, or the advent of any heaven-born actor or actress. Probably the most remarkable feature is the decadence of *opéra bouffe* and burlesque; for whereas during recent years at least ten out of the fifty metropolitan theatres were devoted to this class of entertainment, at the present time apparently only three or four of them still profitable. The only form of comic opera which seems likely to enjoy a permanent existence is that originated by Sir Arthur Sullivan and Mr. W. S. Gilbert; and as few can impeach the excellence of the music composed by the former, or the high-class tone of the latter's humour, it is possible that the more meretricious attractions of the rival class will pass away without being very generally regretted. "The Mikado," which has been running for the greater part of the year at the **Savoy Theatre**, has proved one of the most successful productions of the above named author and composer. The position of *opéra bouffe* in popular favour has been taken to a large extent by what is known as "farceful comedy." It is true that the **Criterion Theatre**, with its admirable company of comedians, headed by Mr. Charles Wyndham, has relied on this form of play ever since its first opening; but 1885 has seen the unusual spectacle of no less than six successful productions which may be classed under the above head. Chief amongst which are "The Private Secretary" at the **Globe**, "The Magistrate" at the **St. James's**, "The Candidate" at the **Criterion**, and "The Great Pink Pearl" at the **Princes's**. The two named of these pieces is an adaptation from the German, and "The Candidate" is a comedy of Gallic birth; but there is little doubt that Mr. Pinero's great success at the **St. James's** is one on which native talent may justly congratulate itself. We may also note,

with some little pride, that "importations from France" are on the decrease, although we have had, it is true, an almost continuous run of **French plays**, performed in French by French companies, at the **Gaiety** and **Royalty** theatres. Putting aside the revival of "As you Like it" at the **St. James's Theatre** in the spring, **Shakespeare** has not been requisitioned as much as in the years 1883 and 1884. Mr. Wilson Barrett (*q.v.*) having rested content with his production of "Hamlet" at the **Princess's Theatre**, and not having yet given us his promised performances in "King Lear" and "Othello." Mr. Irving (*q.v.*) also, after his return from America in May, contented himself for a time with a revival of Mr. Wills' "Olivia," and has signalled the close of the dramatic year by a magnificent production of "Faust," an adaptation by the same author of Goethe's famous work. In this, aided by Miss Ellen Terry (*q.v.*), who makes an ideal **Marguerite**, it is probable he will continue to appear at the **Lyceum** for many months to come. At the **Princess's**, a play by the late Lord Lytton, entitled "Junius," was produced by Mr. Wilson Barrett at the beginning of the year, but achieved no great measure of success. In August "Hoodman Blind," a new melodrama by Mr. Henry A. Jones and Mr. Barrett, shared a better fate; and it is evident that this class of play is best suited to the capabilities of the **Princess's** company. Amongst miscellaneous productions which are worthy of note we may mention those of "In his Power," a drama by M. Quinton, at the **Olympic**; "The Last Chance" and "Harbour Lights," typical **Adelphi** pieces by Messrs. G. R. Sims and H. Pettitt; "Human Nature," by the last named author, at **Drury Lane**; "Open House," a farcical comedy by the late H. J. Byron, at the **Vaudeville**; "Mayfair," an adaptation of Sardou's "Maison Neuve," at the **St. James's**; "Dark Days," a dramatised version of Hugh Conway's story of that name, at the **Haymarket**; and "Going it," a comedy by the veteran author of farces, Mr. Maddison Morton, at **Toole's Theatre**. The stage has suffered some loss by the retirement of Mr. and Mrs. Bancroft from the management of the **Haymarket Theatre**. Miss Mary Anderson, after a successful tour in the provinces, returned to America in the autumn; and Mrs. Langtry, after an equally prosperous venture in the latter country, reappeared on the London stage last spring. Amongst performances somewhat unusual in their character, we may note the open air representations of "As you Like it," and the "Faithful Shepherdess," under the auspices of Mr. Godwin and Lady Archibald Campbell, in the grounds of Coombe Wood House; the performances on the stage of the **Japanese Village**; and those given by a company of Indian Parsees at the **Gaiety Theatre**. Mr. Carl Rosa, in the course of a successful season of English opera at **Drury Lane**, introduced two new works "Nadabha" and "Mamon" to the London public. **Italian Opera**, however, has been anything but satisfactorily represented, the only performances given being a few at **Covent Garden** in July, with Madame Patti (*q.v.*) as the principal attraction. During a short season of **French Opera** at the **Gaiety**, Mdlle. Van Zandt made a great success by her appearances in "Mignon" and "Lakmé."

Drapers, The Worshipful Company of. See CITY GUILDS, THE.

"Drawback," Customs. See REVENUE, THE.

Drinking, Excessive. See CONONERS' INQUESTS (APPENDIX).

Drogheda, Henry Francis Seymour Moore, P.C., 3rd Marq. of (creat. 1791); Baron Moore (1801), by which title he holds his seat in the House of Lords; was b. 1825; succeeded his uncle 1837.

"Druid." See NOMS DE PLUME.

"Dublin Review." See METAPHYSICAL SOCIETY.

"Dubosq and Lesurques." See IRVING, HENRY.

Ducie, Henry John Reynolds Morton, P.C., 3rd Earl of (creat. 1837); Baron Moreton (1837), was b. 1827; succeeded his father 1853. Was M.P. for Stroud (July 1858 to June 1853).

Duckham, Mr. Thomas, M.P., of Baysham Court, near Ross, Herefordshire, was b. 1816. Educated at Bristol and Hereford. Is J.P. for Hereford, founder of the Central and Associated Chambers of Agriculture, a member of the Smithfield Club, and the Bath and West of England and Southern Counties Association. Returned as a tenant-farmers' candidate, in the Liberal interest, as member for Hereford (1880-85); North Herefordshire (1885).

Ducetet's Stethoscopic Microphone. See MICROPHONE.

Duff, Mr. Robert William, P.C., M.P., was b. 1835. Commander R.N. Retired List. Appointed a Junior Lord of the Treasury (1882). Is Deputy Lieutenant and J.P. for Banffshire and Kincardineshire. Returned in the Liberal interest as member for Banffshire (1861-85); re-elected 1885. Civil Lord of the Admiralty in the present administration (Feb. 1886).

Dufferin, Frederick Temple Hamilton-Blackwood, P.C., 1st Earl of (creat. 1871); Baron Dufferin (1800); was b. at Florence 1826; assumed the name of Hamilton by royal licence (1862); succeeded his father in the English barony and the Irish honours (1841). Educated at Christ Church, Oxford; was a Lord-in-waiting to the Queen (1849-52 and 1854-58); was attached to Earl Russell's special mission to Vienna (Feb. 1855); sent as British commissioner to Syria in relation to the massacre of Christians (1860); was Under-Secretary of State for India (Nov. 1864 to Feb. 1866), and Under-Secretary for War from the last date till June following; Chancellor of the Duchy of Lancaster (Dec. 1868 to April 1872); Governor-General of the Dominion of Canada (1872-78); Ambassador at St. Petersburg (1879-81), when he was appointed to Constantinople; has been Viceroy of India since 1884.

Dulcigno. See ITALY.

Dumas fils (Alexandre), French novelist and dramatist, was b. at Paris, July 28th, 1824. He is the son of Alexandre Dumas père, the well-known author of "Monte Christo." He was educated at the Collège Bourbon, and at the age of seventeen published a little volume of poems, "Péchés de Jeunesse." He then accompanied his father on travels in Spain and in North Africa. On his return he published numerous novels, the most characteristic being "La Dame aux Camélias," which created a general sensation. The latest achievement of Dumas fils is a dramatic masterpiece, entitled "Denise." In 1875 he was elected to the French Academy. M. Dumas is a most voluminous writer.

Duncan, Colonel F., M.P., LL.D., D.C.L., was b. 1836. Entered the Royal Artillery (1855). Is a Fellow of the Geological and

Royal Geographical Societies. Received third-class of the Osmanlieh for his services in Egypt (1883), and for his services in the recent Nile expedition was made a C.B., receiving the War Medal. Author of "The History of the Royal Artillery," "The English Spain," etc. Returned in the Conservative interest as member for Finsbury, Holborn Division (1885).

Duncan, Mr. David, was b. 1831. J.P. Cheshire. Returned in the Liberal interest as member for Barrow-in-Furness (1885).

Duncombe, Mr. Arthur, M.P., was b. Educated at Univ. Coll., Oxford. Called to bar at Lincoln's Inn (1867). He is a J.P. the North and East Ridings of the county York. Returned in the Conservative interest as member for Howdenshire Division, East Riding (1885).

Dundee, Jute Trade of. See TRADE OF

Dundonald, Thomas Barnes Cochran, 11th Earl of, d. Jan. 15th, 1885; was b. A. 1814. His lordship, who succeeded his father the distinguished Admiral (Oct. 1860), elected a representative peer for Scotland 1879.

Dunmore, Charles Adolphus Murray, Earl of (creat. 1686); Baron Dunmore (1814) by which title he holds his seat in the House of Lords; was b. 1841; succeeded his father 1845. Was a Lord-in-waiting to the Queen (1874 to May 1880).

Dunning, Baron. See ROLLO.

Dunraven and Mountearl, Wyndham Thomas Wyndham-Quin, 4th Earl of (creat. 1822); Baron Kenry (1866), by which title holds his seat in the House of Lords; was b. 1841; succeeded his father 1871; Under-Secretary for the Colonies in the Salisbury administration (1885).

Dunsandle and Clanconal, Denis George Daly, and Baron (creat. 1845); was b. 1810; succeeded his father in 1847; elected representative peer for Ireland (Sept. 1851).

Dunsany, Edward Plunkett, 16th Bt. (creat. 1461), b. 1808; succeeded to the peer 1852. Irish representative peer.

Durant, Mr. J. Charles, M.P., was b. at Fordingbridge. Formerly connected with the printing trade. Assisted in founding Land Nationalisation Society and the People's League. Returned in the Liberal interest as member for Stepney Division, Tower Hamlets (1885). Successfully maintained his seat on occasion of the recent petition (March 1886).

Durham, John George Lambton, 3rd Duke of (creat. 1833); was b. 1855; succeeded his father in 1879.

Durham, Right Rev. Joseph Barber Lightfoot, D.D., 82nd Bishop of (founded 635); b. at Liverpool April 13th, 1828; educated Trin. Coll., Cambridge B.A. senior class and 31st wrangler, 1851, M.A. 1854, D.D. 1858. Hon. D.C.L. Oxon. (1879); ordained deacon (1854), priest (1858); was appointed Chaplain to his late Royal Highness the Prince Consort (1861); Honorary Chaplain to the Queen (1861); Canon Res. St. Paul's (1871); Deputy Clerk of the Closet (1875); consecrated 1879.

Dutch Meat Supply. See MEAT SUPPLY.

Dutch Woollen Industry. See WOOL AND WORSTED MANUFACTURES.

"Duties." See REVENUE, THE.

Dutton, Baron. See HAMILTON, DUKES
Dvorák, Anton (pronounced Dvorshak), one of the foremost of our younger musicians,

amian, b. 1841, at Mühlhausen-on-the-Saale, the son of an innkeeper. He learnt music first from the gipsies, but at sixteen entered the Prague Conservatoire, finally obtaining a living as bandsman and organist. Applying for help to the Minister of Public Instruction, his case was referred to Brahms, who befriended him. Dvorák's symphonies and Slavonic rhapsodies are very fine original works; but his "*Stabat Mater*," produced under the composer's direction in London in 1883, has placed him as a really great composer. His "*Metre Bride*," recently (Feb. 1886) performed in London, met with a very enthusiastic reception.

Dyads. See MONAD.

Dyas. See GEOLOGY.

Dykes, The Worshipful Company of. See WILKINS, THE.

Dyke, The Rt. Hon. Sir William Hart, Bt., P.C., M.P., of Lullingstone Castle, Dartford, was b. 1837. Educated at Harrow and Christ Church, Oxford, where he graduated B.A. Has held the following appointments: **Comptroller Secretary to the Treasury** (1874-80), **Chief Secretary for Ireland** (1885). **J.P. and Deputy Lieutenant** for Kent. **W. Hart Dyke** married (1870) **Lady Emma**, eldest daughter of the seventh Earl of Sandwich. Returned in the Conservative interest as member for West Kent (1865-68); for Kent (1868-85); North West Kent (1885).

Dynamical Geology. See GEOLOGY.

Dynamite (from the Greek *dynamis*, force). An explosive mixture, used in Germany and France for mining, blasting, and military work. The explosive force of dynamite is, under the most favourable conditions, sometimes as great as that of gunpowder. There are two chief forms of dynamite, and each of these again may occur in more than one variety. But in all, the essential explosive is nitro-glycerine. **Nitro-glycerine** is a compound formed by the action of a mixture of two parts by weight of sulphuric acid and two parts by weight of strong nitric acid, on one part by weight of glycerine. In dynamite the light brown, oily, inodorous liquid nitro-glycerine is mixed with certain absorbent matters, or with materials that are decomposable on explosion. The former or absorbent materials, silica, mineral ash, Tripoli powder, and the so-called asbestos earth, are examples. Both these materials are made up of countless silicious cases of very low plants—the diatomaceæ. But the most usual absorbent is **Kieselguhr** (flint-earth), porous silica earth, also of diatom cases. The proportions by weight of the nitro-glycerine and Kieselguhr are 3 to 1. The dynamite formed by the mixture of these is **Dynamite No. 1**. Of materials exploding on decomposition, resin, charcoal, sulphur, nitrates of potassium and sodium are examples. The most usual are a mixture of charcoal and nitre (potassium nitrate). The dynamite formed by the mixture of these two with nitro-glycerine is **Dynamite No. 2**. Dynamite, invented by **Nobel** in 1867, is like nitro-glycerine, spontaneously explosive.

Dynamo. All the present forms of dynamo-electric machines, or "dynamoes" as they are shortly called, are based on **Faraday's** researches on the phenomena of induction. He showed that when an electric current circulates in a wire forming part of a circuit, secondary

temporary currents are induced in a neighbouring wire. These secondary currents are termed induction currents, and can be made of greater intensity than that of the primary current by increasing the number of turns or convolutions in the two wires. **Pixii** constructed the first magneto-electric machine, in which a compound horse-shoe magnet, by its revolutions, produced similar induction currents in coils of wire wound round its armature. **Siemens**, in 1857, greatly improved the shape of the armature bobbins, and adopting a suggestion of **Clarke**, made these lighter armatures rotate in front of a stationary magnet. In modern dynamo-electric machines the inducing magnets, or "**field**" magnets as they are termed, have cores of soft iron, which at starting have only a very slight magnetic power; this trace is, however, sufficient to induce a weak current in the coils of the rotating armature, which current is conducted round the soft iron cores; and thus they become magnetised more strongly, and can then induce a fresh, stronger current in the coils of the armature. The **Siemens** machine was the first dynamo constructed on this principle, and all other more recent machines are improvements on or modifications of it. Dynamoes can be made to generate either "**alternating**" or "**continuous**" currents. The first large alternating machine was made by **L'Alliance Company**, and they have continued their construction of machines of the same pattern for the production of the electric light in lighthouses. The most efficient of the alternating current machines is the "**Brush**," and it is so constructed that during each complete revolution every pair of bobbins once supplies the magnets with a current, and once the lamps. A machine which will light 16 to 18 "**arc**" lamps revolves at a speed of 750 revolutions per minute, and offers a resistance of about four ohms. A larger **Brush** machine has been constructed for 40 lamps, and when driven by an engine of 30 horse-power, gives a current of ten amperes and an electromotive force of 1800 volts (for meaning of these terms see article on **ELECTRICITY**). In **Ferranti's** dynamo a zigzag copper tape is substituted for wire in the armature, and the usual iron core is dispensed with. It needs a separate small dynamo to excite its field magnets. The "**Gordon**" and "**Edison**" generators are also noteworthy, and the "**Parsons**," a new high-speed dynamo, whose armature revolves 15,000 to 24,000 times per minute. Amongst machines generating continuous currents should be mentioned the "**Gramme**" machine, with an armature in the shape of a ring, round which are wound several helices of copper wire, the terminals of which are brought to the commutator or collector. This consists of a number of copper strips, equal in number to the helices to which each is severally connected, well insulated from one another, and arranged as a hollow cylinder, through which the shaft of the machine passes. In addition to electric lighting work, dynamoes are used for the electrical transmission of power, and for the preparation of pure metals. At the Royal foundries at Oker five to six hundred-weight of copper are precipitated daily by three Siemens plating machines, consuming from eight to ten horse-power.

Dynamo Electric Machines. See DYNAMO.
Dynevor, Arthur de Cardonnell Rice, 6th Baron (creat. 1780), was b. 1836; succeeded his father 1878.

E

Eads, Captain. See **ENGINEERING** (TEHUA-TEPEC SHIP RAILWAY).

"Early History of Institutions." See **MAINE, SIR HENRY.**

Earth, Theory of. See **GEOLOGY.**

Earthquakes may be defined as disturbances of the earth's crust, generally subterranean, propagated by the elasticity of the rocks. The study of earthquakes is termed **seismology**; and instruments for measuring the earthquake waves are called **seismometers**. The late **Robert Mallet** laid the foundation of modern seismology, and his "Report on the Great Neapolitan Earthquake of 1857" is a classical work. Serious objections have, however, been raised to some of his methods of investigation. The centre of disturbance is known technically as the **seismic focus**, and the point on the surface vertically above the focus is the **epicentrum**. From the focus, which Mallet believed was never seated at a very great depth, waves of elastic compression are propagated in all directions; and he believed that the wave-paths and their angles of emergence at the surface might be determined from observations on the fractures in walls and buildings, and on the situation of objects which have been overturned by the shock. There seems to be a close connection between seismic and volcanic phenomena, and within the last two or three years both have been unusually violent. The earthquake of **Ischia**, on July 28th, 1883, has been studied by **Dr. Johnston-Lavis**, of Naples, who is preparing an elaborate report upon the subject. The earthquake in East Anglia on April 22nd, 1884, was the most serious that had been felt in Britain for several centuries. Its effects have been carefully investigated by a committee of the Essex Field Club, and **Professor Meldola's** valuable report has recently been published (December 1885). The most destructive shocks in 1884 were those which disturbed southern Spain in the last days of December. Professor Fuchs, in his twentieth annual report ("Die Vulkanische Ereignisse"), registers 123 earthquakes as having occurred during the year 1884. But **Professor Milne** believes that in the empire of Japan alone there occurs, on an average, at least one earthquake per day. The opportunities for studying seismic phenomena are so favourable in Japan that a Seismological Society has been established at **Tokio**. A paper by Professor Milne on the construction of buildings in earthquake-shaken countries was read at the Institution of Civil Engineers on December 22nd, 1885. Earthquakes of great violence were felt in Kashmir on May 30th, and in Bengal on July 14th, 1885, and both these have been reported upon by the Geological Survey of India.

Easement. An easement has been defined as "a privilege without profit which the owner of one neighbouring tenement hath of another, existing in respect of their several tenements, by which the servient owner is obliged to suffer or not to do something on his own land, for the advantage of the dominant owner." The following observations may clear up this definition. As a rule, each man may do what he likes upon his own land, and other people may do nothing there except upon sufferance.

As a rule also, the possession of land by one man gives him no right to meddle with land possessed by another man. But in certain cases one owner has a right, in virtue of his tenement, to enjoy certain advantages out of another man's tenement. Suppose that A's land is encircled on every side by B's land, but that A time out of mind has been accustomed to pass with horses and carts along a track over B's land. B cannot now close this track against A. Again, a common is in the eye of the law the land of the lord of the manor. But the commoners, usually the freeholders and copyholders within the manor, have a right to cut turf, dig gravel, etc., upon the common, and the lord of the manor cannot interfere with the exercise of this right. Both of these rights would in Roman law have been termed **servitudes**; but in English law the former is called an easement, the latter a **profit à prendre**. An easement is in the above definition called a privilege without profit not because it is valueless, for it is often worth thousands of pounds; but because, unlike a **profit à prendre**, which may not be worth sixpence per annum, it gives no right to take any part of the substance of the land which it affects. Thus an easement is the right to use another person's land enjoyed by a man who has land of his own, and in virtue of his having such land. Everybody is entitled to use the high road, and, so far, to walk upon land owned by others without their consent. But this right is not an easement, for it is enjoyed by multitudes who never owned a foot of land. The tenement to which the benefit of the easement is attached is called the **dominant tenement**. The tenement on which the burthen of the easement falls is called the **servient tenement**. The most important easements are rights of water, rights to receive light, and rights of way. Easements are acquired either by express grant (which must be by deed) or by prescription, that is to say by uninterrupted, open and peaceable enjoyment for a period of years variously defined for various easements. They are extinguished either by express release (which must be by deed), or by release implied either from the union of both tenements in the hands of the same owner, or from an act of the owner enjoying the easement which necessarily destroys it, or from his deliberately acquiescing in its prolonged interruption. (See **Gale on Easements**.)

Eastern Question. The modern Eastern Question had its origin more than thirty years ago, in a small squabble between France and Russia, about the keys of the "holy places" in Jerusalem. Any one who turns up the Blue Books of that period will find one of the most important of them entitled "**Correspondence respecting the Rights and Privileges of the Latin and Greek Churches in Turkey**," France representing the Latin and Russia the Greek Church. The dispute soon developed into a political controversy of the first magnitude; and on Russia making certain demands for reparation from Turkey, England took the side of the Porte, which, being backed both by France and England, declined the demands made through **Prince Menachikoff**, and

war broke out between Turkey and Russia. In the spring of 1854 France and England declared war against Russia, and for a year and a half the eyes of the civilised world were turned to Sebastopol, which the allies captured, after a year's siege, in September 1855. Peace was concluded in the spring of 1856, the most important result of which was, that Russia was forbidden to have either a fleet or a fortress in the Black Sea. This portion of the Treaty was subsequently, in 1870, abrogated, at the desire of Russia, backed by Germany, then flushed with her victories over France. The next phase of the Eastern Question was the insurrection in Bosnia and Herzegovina in 1875, and the diplomatic interference of the Great Powers. Then followed the declaration of war against the Porte by Servia (1876), the overthrow of the latter, and finally the invasion of Turkey by Russia in the spring of 1877. After being delayed for five months by the obstinate defence of Plevna, the Russians crossed the Balkans in the depth of winter, and arrived on the Sea of Marmora, within sight of the minarets of Constantinople, in the month of February. By this time the relations between England and Russia had been somewhat strained, and the English fleet had passed the Dardanelles, and lay ready for action, should the Russians attempt to enter Constantinople. The Russians, however, advanced no farther than San Stefano, which gave its name to the peace which soon afterwards was signed between Russia and Turkey. But one part of that treaty was considered by the British Government so outrageous—namely, the formation of a huge Bulgaria, stretching from the Danube to Adrianople—that Lord Beaconsfield and his colleagues declined to recognise it, and insisted on the Treaty being revised. This was done by the Berlin Treaty, which created Eastern Roumelia, and handed over Bosnia to the administration of Austria. In November 1885 Eastern Roumelia proclaimed her union with Bulgaria, and Prince Alexander (*q.v.*) of Bulgaria accepted the responsibility thrown upon him, and proclaimed the union of the two provinces. This led to an agitation in Servia, to a demand for an enlargement of her borders, and ultimately to war. A very few weeks sufficed to prove the hollowness of King Milan's military system, which completely broke down. Prince Alexander defeated the Servians in several battles, and finally crossed the frontier and captured Pirot. This event practically ended the war. (For further particulars see BULGARIA).

Eastern Roumelia was an autonomous province of Turkey, created by the Berlin Treaty, under a Christian governor, to be nominated by the Porte with assent of the Powers, order being maintained by native gendarmerie and militia, the Porte having the right (not yet exercised) of defending the frontiers and maintaining troops there. The legislative power was confided to a provincial assembly, partly elective and partly nominated by the governor. The area is about 13,500 miles. Pop. about 850,000. Revenue has not exceeded an average of £600,000, and the Turkish tribute, which was fixed at three-tenths of the revenue, was, in consequence, assessed by the Assembly at £180,000. The first governor under the treaty—a Bulgarian, Prince Vagarides, known also as Aleko Pasha—was appointed in May 1879 and his rule was prosperous and successful.

In 1883, owing to an attempt of the Russian Consul-General to procure the appointment of a Russian chief of the staff to the Roumelian militia, diplomatic relations were broken off. On the expiration of Vagarides' term of office he was succeeded by his chief minister, also a Bulgarian, M. Christovitch, otherwise known as Gabriel or Gavril Pasha, who was deposed by the insurrection. (For details of events arising out of this see BULGARIA).]

Eastward Position. The rubrics which regulate the position of the officiating priest during the Communion Service of the Church of England direct, in the first place, that he shall stand "at the north side of the table," and at the Prayer of Consecration he is spoken of as "standing before the table." The evangelical, or "Low Church" party, generally interpret "north side" as identical with north end, while the "High Church" party hold it to mean the northern part of the west side—north, that is to say, of an imaginary line drawn east and west through the middle of the table. In this latter case the priest faces to the east—or almost so—and away from the congregation. The eastward position is supposed to emphasize the representative character of the celebrating priest, and was on this ground opposed by the Puritans—who, however, did not interpret "side" to mean "end," but altered the position of the table so as to make its sides north and south and its ends east and west. This endeavour was defeated, but the dispute remains. Antiquity, no doubt, is on the side of the Eastward Position; but the legal question is more difficult. In the case of *Hibbert v. Purchas* (1870) the Court of Arches and the Judicial Committee of the Privy Council decided that the Eastward Position at the Prayer of Consecration was illegal; but that judgment has been held to have been given *in personam*, and not *in rem*, and, though enforced by suspension against Mr. Purchas, has never been acted upon by the Bishops, nor has the question been again raised. The present rubric dates from 1552, that of Edward VI.'s first Prayer-Book (1549) having been "the priest standing humbly afore the midst of the altar." A very ancient custom, not wholly extinct even now, was for the holy table to be placed at some distance from the east end of the church, with the officiating priest on the eastern side of it, facing the people across it. In the coronation service of Queen Victoria (1838) the direction ran "the Queen kneeleth down at the faldstool (in the midst of the area over against the altar), and the Archbishop standing at the north side of the altar, saith this prayer or blessing over her." Here "north side" could only mean the northern part of the west side. Probably the question will now be suffered to remain an open one.

Eaton, Mr. Henry William, M.P., F.R.G.S., etc., was b. 1816. He is a silk merchant on an extensive scale. Deputy Lieutenant for Suffolk and the Tower Hamlets. Returned in the Conservative interest as member for Coventry (1865-80, 1881-85); re-elected 1885.

Ebor Handicap. See RACING.

Ebrington, Viscount, M.P., the eldest son of the third Earl Fortescue, was b. 1854. Educated at Harrow and Trin. Coll., Cambridge, where he graduated with honours (1875). Is Deputy Lieutenant for Devonshire, and J.P. for South Molton. Captain in the North Devon

Hussar Yeomanry Cavalry. Private secretary to Earl Spencer when Lord President of the Council. Returned in the Liberal interest as member for Tiverton (1881-85); West Devon (1885).

Ebury, Robert Grosvenor, 1st Baron (creat. 1857); b. 1801. Was M.P. for Shaftesbury (1822-26), for Chester (1826 to Jan. 1847), and for Middlesex (1847-57.)

Eccentricity of the Earth's Orbit. See GLACIAL PERIOD.

Ecclesiastical Commissioners. The, owe their origin to the Act 6 and 7 Will. IV., c. 77. Incorporated for the purpose of making schemes to carry out the recommendations of certain earlier commissions appointed to inquire into the endowment of bishoprics, the state of cathedral and collegiate churches, the best way of providing for the cure of souls, etc. The Act provides that the two Archbishops, the Bishop of London, the Lord Chancellor, Lord President, and First Lord of the Treasury for the time being, as well as a Secretary of State named by the sovereign, with three others therein named, should be of the commission. A subsequent Act added all the remaining bishops in England and Wales, the Chief Justice, and others. Membership of the Church of England has always been an indispensable condition of holding the office. A number of Acts have from time to time imposed fresh duties upon the Commissioners. By an Act of 1856 the Church Building Commissioners had their powers transferred to the Ecclesiastical Commissioners. By Acts of 1843, 1844, and 1856, the Commissioners were empowered to form new parishes wherever necessary, and to contribute out of the funds under their control to the endowment of the livings therein. An Act of 1850 created a Church Estates Commission, whose members acted as an estates committee to the Ecclesiastical Commission as well. To the Estates Commissioners were transferred all the estates held in trust for the Ecclesiastical Commissioners, with all powers of management, etc. In general, it may be said that the function of the Ecclesiastical Commissioners is to provide for the adjustment of Church endowments to the wants of the Church.

Echinoderma. See ZOOLOGY.

"Echo" (an evening paper, established December 1868, price 3d). Its principles are Liberal. The *Echo* gives daily, in a condensed form, the chief and latest news of the day, foreign, home, and commercial, of which it treats in an independent manner. Editor, Mr. W. Passmore Edwards.

Ecole Forestière. The. See FORESTRY.

Ecuador. A republic, governed by a President, with the assistance of a Congress composed of a Senate representing the provinces, and a Chamber of Deputies the people. Area 248,370 square miles. Pop. about 950,000. Revenue about £386,000; expenditure about £640,000. Debt about £3,640,000, inclusive of unpaid interest for fifteen years. Army about 1600 men. Its history since 1870 presents no feature of importance, beyond the civil wars and pronunciamentos, almost normal in the district.

Edinburgh, H.B.H. Prince Alfred Alexander William Ernest Albert, Duke of, P.C., K.G., K.T., K.P., G.C.S.I., G.C.M.G., 1st Duke (creat. 1886), was b. 1844; second son of the Queen. Mar. (1874) the Grand Duchess Marie Alexandrovna, dau. of the late Alexander II.

of Russia. Entered the Royal Navy (1858) Admiral in command of the Mediterranean Squadron (1886). Is Master of the Trinity House, and heir presumptive to the Duchy of Saxe-Coburg and Gotha.

"Edinburgh Review," the well-known quarterly review (6s.), was founded October 25th, 1802, its first editor being F. Jeffrey, afterwards Lord Jeffrey. The name of Sidney Smith was associated with the *Review*, as also those of Lord Brougham and other most distinguished men in English literature. The *Edinburgh* still holds its ground among its numerous rivals.

Educational Progress, London School Board and Voluntary Schools (1870-85). See SCHOOL BOARD FOR LONDON.

Edwardes-Moss, Mr. Tom Cottingham M.P., Otterspool, Lancs., was b. 1855. Educated at Eton and Brasenose Coll., Oxford. Lieut. Lancashire Hussars Yeomanry. Ex-President Oxford Univ. Boat Club. Returned in the Conservative interest as member for Widnes Division, South-West Lancashire (1885).

Edingham, Henry Howard, 2nd Earl of (creat. 1837); was b. 1806; succeeded his father 1845. Represented Shaftesbury in parliament (July 1841 to Feb. 1845). The 2nd Baron was made Earl of Nottingham for his exertions against the Spanish Armada.

Egan, Mr. Patrick. See HOME RULE, and NATIONAL LEAGUE.

Egerton, Hon. Alan de Tatton, M.P., was b. 1845, and is a son of the late Lord Egerton of Tatton. Educated at Eton, and is a lieutenant in the Earl of Chester's Yeomanry Cavalry, J.P. for Cheshire, and capt. 18th Volunteer Battalion, Prince Consort's Own Rifles. Sat in the Conservative interest for Mid Cheshire (1883-5), and was elected for Cheshire, Knutsford Division (1885).

Egerton, The Hon. Alfred John Francis, M.P., second son of the second Earl of Ellesmere, and brother of the present Earl, was b. 1854. Held a commission as lieutenant in the Grenadier Guards. Returned in the Liberal interest as member for Eccles Division, South-East Lancashire (1885).

Egerton, Vice-Admiral The Hon. Francis, M.P., F.R.G.S., the second son of the first Earl of Ellesmere; was b. 1824, educated at Harrow, and married (1865) Lady Louisa Caroline, only daughter of the present Duke of Devonshire. Entered the Royal Navy (1840), and retired as Vice-Admiral (1878). Admiral Egerton was Naval A.D.C. to the Queen (1865-68). Is J.P. for Surrey. Returned in the Liberal interest as member for East Derbyshire (1868-85); re-elected 1885.

Egerton, Wilbraham Egerton, 2nd Baron (creat. 1859), was b. 1832; succeeded his father 1883.

Egibi Tablets. See BIBLICAL ARCHÆOLOGY.

Egli, Dr. See OLD CATHOLICS.

Eglinton and Winton, Archibald William Montgomerie, 14th Earl of (creat. 1507); Earl of Winton (1600), by which title he holds his seat in the House of Lords; Lord Montgomerie (1448), Baron Seton (1448), Baron Kilwinning (1615), Earl of Winton (1859), Baron Ardrossan (1806); was b. 1841; succeeded his father 1861.

Egmont, Charles George Perceval, 7th Earl of (creat. 1733); Baron Lovell and Holland (1762), Baron Arden (1802), by which last two titles he holds his seat in the House

of Lords; was b. 1845; succeeded his uncle 1874. Was M.P. for Midhurst.

Egypt. A kingdom tributary to the Porte, under the rule of Mohammed Tewfik, sixth of the dynasty, founded by Mohammed Ali. The first four rulers bore the title of "Vali," or Viceroy, but in 1866 the then ruler, Ismail, in consideration of the increase of the annual tribute from £376,000 to £720,000, received from the Sultan the title of Khedive or "King," and the succession was made direct from father to son instead of descending, in accordance with Turkish law, to the eldest male of the family. In 1873 the right of concluding treaties with foreign powers and of maintaining armies was also conceded. Area of Egypt proper 394,240 sq. miles, with a population, according to census of 1882, of 6,806,000. Revenue (1885) about £8,884,000; expenditure about £8,300,000; debt, at close of 1883, about £78,400,000, exclusive of loans upon the Daira and Dominion lands to the amount of £16,500,000, and of a floating debt (arising from deficiencies in revenue of former years, Alexandria indemnities, etc.), to meet which a preference loan of £9,000,000, under the guarantee of the Powers, was contracted in 1885. The army now consists of about 5,800 men. Principal products, cotton and cereals. Sixty per cent. of commercial business is with England. Exports in 1883, £12,309,885; imports £8,596,976. In 1875, the finances having fallen into great disorder in consequence of the extravagance of the Khedive Ismail, the British Government, to afford him some temporary relief, purchased in Nov. 1875 for £4,080,000 the shares in the Suez Canal owned by him. In April 1876 Mr. Cave, who had been deputed to inquire into the finances, recommended that a superior power should intervene to restrain the prodigality and oppression of the Government. In November Messrs. Goschen and Joubert, on the part of the bondholders, made a similar report; and in Sept. 1878 Messrs. Rivers Wilson and De Blignières were appointed respectively ministers of finance and public works, and controllers of the expenditure. Their interference being found to be irksome, they were dismissed by Ismail in April 1879; but he himself at the instance of the Great Powers was in June deposed by the Porte, and retired to Naples with an enormous private fortune, his place being taken by his son, the present Khedive. A commission, usually known as the Anglo-French or Dual Control, was appointed by the Powers for the liquidation of the debt (with Messrs. Baring and De Blignières as controllers), and for the reform of the consular and mixed courts. In Feb. 1881 the soldiers in Cairo mutinied, in consequence of alleged favouritism shown to the Turkish and Circassian officers, and were only appeased by the dismissal of the War Minister. In September the army under Arabi Pasha again revolted, demanding an increase in its numbers and pay. A new ministry was installed at their instance, and tranquillity temporarily restored. In Jan. 1882 Arabi was appointed Under-Secretary for War, and in the same month the Assembly of Notables, convoked by the ministry, claimed the right to regulate the budget in spite of the protest of the Anglo-French control. A new ministry was formed, in which Arabi as Minister for War was the leading spirit; and on May 10th the Chamber repudiated the authority of the Khedive, but on a threat of the intervention of the Anglo-French squadron,

Arabi was forced to resign. On the 27th, however, he was practically reinstated as dictator, and fortified Alexandria, in which, in spite of the presence of the combined fleets, a rising against Europeans took place on the 11th June, followed by the departure of most of the foreign inhabitants. Arabi having refused to desist from fortifying Alexandria, that city was on July 11th bombarded by the British fleet, and abandoned by Arabi. During the consequent anarchy a large part of the city was destroyed by the mob. Order was restored by forces landed from the fleet, of the protection of which the Khedive availed himself, and issued a proclamation degrading Arabi, who had now closely invested the city. The French Government not being willing to incur the expense of a war to reinstate the Khedive, ordered their fleet to withdraw; but Great Britain, on the contrary, sent out a strong force under Sir G. Walseley, which in its advance by way of Port Said and Ismailia and the Sweet Water Canal upon Cairo, encountered Arabi's forces, and after a preliminary skirmish at Kassassin completely routed them on Sept. 13th at Tel el Kebir. Arabi was taken shortly after, tried, and sent as a state prisoner to Ceylon; and the country being occupied without further resistance, the British force was withdrawn, leaving about 7,000 men as a garrison until the reorganisation of the Egyptian army had been completed. Lord Dufferin having in the mean time reported upon the general state of the country, at his instance, in spite of much delay and opposition on the part of France, the so-called Dual Control was abolished in Jan. 1883, and Mr. E. Vincent appointed financial adviser to the Khedive. In May 1884, as a result of the indemnities consequent on the burning of Alexandria, of an outbreak of cholera, and the fall in prices of produce, a deficit of £8,000,000 had occurred; and a Conference of the Powers was held on June 28th, which, owing to the divergence in opinion between England and France, proved abortive. Further negotiations, however, resulted in the conclusion of a Convention between the Great Powers, by which interest on a loan of £9,000,000, etc., at 3½ per cent., was guaranteed, and was soon afterwards issued accordingly. The British army would probably have been withdrawn in Nov. 1883, as contemplated, but for the insurrection in the Soudan, and the annihilation of an Egyptian army under General Hicks by the Mahdi in Nov. 1882. Almost simultaneously a force under Captain Moncrieff was defeated near Suakim by another body of the insurgents, under Osman Digna, and the towns of Sinkat and Tokar closely invested. Baker Pasha attempting to relieve these places with an Egyptian force, was defeated at El Teb on Feb. 5th, 1883, with the loss of the greater part of his army, and Sinkat was taken. The English Government, upon the defeat of Hicks Pasha, having advised the Khedive to abandon the Soudan, the ministry of Cherif Pasha, after an ineffectual protest, resigned in favour of Nubar Pasha; and on Jan. 26th, 1884, General Gordon was appointed Governor-General of the Soudan, with instructions to withdraw the garrisons, civil officials, etc., and to hand over the country to such government as the inhabitants might successfully organise. A force under General Graham was also sent to Suakim, by which Osman Digna's forces were, on Feb. 20th, 1884, defeated with great slaughter at El Teb, but

not before Tokar had surrendered. Osman was again defeated at Tamanieb on March 13th, after which the English troops were withdrawn and the defence of Suakim left to the Egyptian troops and the fleet. Gordon arrived at Khartoum on Feb. 8th, and in March recommended the evacuation of the province, leaving Zebehr Pasha, the chief of the old slave dealers' party, to govern it. He also recommended that General Graham should march upon Berber by way of diversion; but both these propositions were rejected by the Home Government. Fears, however, being entertained for his safety, Lord Wolseley was in August sent with an army of 9,000 men to relieve Khartoum, which was reported to be closely invested. Wolseley accordingly conveyed his troops in boats with incredible labour over the cataracts of the Nile, and on Dec. 16th reached Korti, from whence he despatched a flying column on camels, under the command of Sir Herbert Stewart, across the desert to Metemneh, which met and defeated the enemy at Abu Klea on Jan. 17th, 1885. Gen. Stewart, being mortally wounded, was succeeded by Sir Charles Wilson, who after further fighting established a fortified camp on the Nile at Gubat, where he was met by three steamers sent by Gordon from Khartoum, in two of which he pushed up the river to that city, only to find Gordon dead and the place in the possession of the Mahdi. The season being unsuitable for a campaign, the expedition returned to Dongola, and a force under Graham, including Indian troops, with a volunteer contingent from Australia, was sent to Suakim with a view to an advance on Khartoum in the autumn. A railway from Suakim to Berber was at the same time commenced. It was finally decided, however, to abandon the Soudan, and the Nile column was accordingly withdrawn to the Egyptian frontier at Wady Halfa, and an Egyptian garrison only left at Suakim. In April 1885 the suppression of the *Bosphore Egyptien* (q.v.), a newspaper at Alexandria, by Nubar Pasha, in violation of the capitulations, led to an angry correspondence with France. In consequence of the deaths successively of the Mahdi and Osman Digna, and of the relief of Kassala by the King of Abyssinia according to treaty, serious danger to Egypt seemed to have passed away again. Towards the end of November Arabs advanced towards Wady Halfa from the south, and on Dec. 4th some slight skirmishes occurred. On the 12th the attacks were increasing, but had been repulsed, and continual skirmishing took place until December 30th, when the English advanced, and surprised the Arab forces, about 6,000 strong, and severely defeated them, taking four cannon. The advance of the Arabs down the Nile valleys seemed, in consequence, to have been arrested; but on Feb. 11th, 1886, it was reported that Osman Digna was alive and collecting forces in the neighbourhood of Suakim. In March the scheme for the conversion of the Daira and Domain loans was accepted in principle, subject to consent of the Powers, but the negotiations (March 25) delayed in consequence of difficulty raised by the Egyptian Government. Petroleum springs near Suez, discovered by M. Debay (Sept. 1884), visited by Nubar Pasha with a view to their utilisation for the increase of the revenue. It was officially announced that the British troops would retire to Assouan, leaving the Egyptian troops to hold Wady Halfa. Accounts for 1885 published;

actual surplus, after deductions for taxes for debt and Suez Canal share, £321,319. Claims of the Ex-Khedive, Ismail Pasha, to £5,000,000 now under consideration of the Consul-General (27th). Sir H. Drummond Wolff, who was despatched by the Salisbury administration in 1885 on a mission to the Sultan and the Khedive, with a view to an *entente cordiale* between this country and the Porte with reference to Egyptian affairs, has presented various reports of his mission, but those relating to the more recent internal affairs of Egypt have not yet (March 27th) been officially communicated.

Egypt Exploration Fund, The. Was founded in 1883, under the presidency of the late Sir Erasmus Wilson (d. 1884), for the purpose of historical investigation in Egypt, conducted in a scientific manner, with the object of solving some of the many important questions that await the result of excavation. Special attention has been directed to all that can bear on the history of the sojourn and exodus of the Israelites, and the early sources of Greek art. The work is conducted on the principle of careful examination of all details and preservation of the objects found. These objects are of great interest in illustrating comparative art by the influences of Egyptian, Greek, and Syrian styles on one another, the technical processes of work, metrology and ceramic art. The antiquities found, after the claims of the National Museum at Boulak have been satisfied, are divided between the British Museum, the Boston Museum (U.S.A.), and various local museums in this country, such as those of Bath, Bolton, Bristol, Edinburgh, Liverpool, York, and Charterhouse School. The distribution depends mainly on the amount of local support which has been contributed by the several districts represented by the museums. Annual volumes are published, giving all the results of each season's work, with maps and plates. Excavations have been carried on principally at the following sites. 1883. *Tel-el-Maskhuta*, in the Wady Tûmilat, discovered to be *Pithom-Succoth*, described in M. Naville's memoir on Pithom, in which the route of the Exodus is laid down. 1884. *San(Tanis-Zoan)* described in Mr. Flinders Petrie's two memoirs, the first of which ("Tanis: Part I.") has recently been published. 1885. *Saft-el-Henna*, near Zagazig, discovered to be the town of *Goshen*, capital of the district. M. Naville's memoir on Goshen is in preparation. *Nebireh*, in the Western Delta, discovered to be *Naucratis*. Mr. Petrie's memoir on *Naucratis* is in preparation. Excavations have recently been resumed on the site of *Naucratis*, and further discoveries have been announced in the *Academy*, which stated recently that the American branch of the fund now numbers over 500 subscribers.

Egyptian Hieroglyphics. See BIBLICAL ARCHOLOGY and EGYPTOLOGY.

Egyptology. Up to the close of the eighteenth century, the hieroglyphics, or Egyptian sacred writing—which consisted of little pictures of various celestial, terrestrial, and other objects, and which were used from the time of *Menes* (about B.C. 3000) to that of the *Emperor Decius* (A.D. 247), above a thousand years after they ceased to represent the vernacular or spoken language of Egypt—remained to modern learned Europe an insoluble problem. In fact, all existing knowledge of the monumental and literary treasures of ancient Egypt is based

on the fortunate discovery of the famous **Rosetta Stone**, now treasured up in the British Museum. In the year 1799, M. Boussard, a French engineer, discovered in the temple of the god **Tum**, or the Setting Sun, near **Rosetta**, some six miles by river from the mouth of the Nile, a large stone of black basalt, commonly known as the Rosetta Stone; which, at the capitulation of Alexandria, in 1801, was surrendered to General Hutchinson, and, after its arrival in England in 1802, was presented by King George III. to the British Museum. It contained a **trilingual inscription**: one in hieroglyphics, a second in the demotic character, otherwise known as **enchorial** or vernacular, and a third in Greek. It was to some extent imperfect, especially the first or hieroglyphic portion; but there was enough still left to commence the decipherment. The Greek text was of course easily read and translated, and the defective portion conjecturally restored by the Hellenists of Europe. It was a solemn decree of the priests assembled in Synod at **Memphis**, passed as a vote of thanks and a testimonial to **Ptolemy V.** (B.C. 195); and it was ordered to be inscribed in the Greek, demotic, and hieroglyphic characters and languages. "Here, then," in the words of the late Dr. Birch, "was the required key to the lock of the Nile." To **Dr. Thomas Young** we are indebted for the first demonstration, in 1821, of the principle of interpretation; and he made out five of the letters, but never advanced further. A year later **M. Champollion** (jun.), to whom the honour of discovering the language is due, solved the problem, and proved the mixed nature of the language, partly written by signs representing sounds, partly ideas. This decipherment, however, led no further than making out the sounds of certain words and the eliciting of hosts of proper names. It was by careful comparison and critical inductions, that a language was made out which had left behind it neither grammar nor dictionary. The **Coptic**, or the vernacular language of Egypt, was spoken till the sixteenth century of the Christian era; and a considerable literature, chiefly ecclesiastical, produced after the introduction of Christianity, had been handed down and preserved. Three spoken dialects remained, sufficiently resembling the old Egyptian to enable all the grammatical forms, structure, and a considerable portion of the *copia verborum*, to be successfully examined. But this has been subsidiary to the process of eliciting the meaning of word after word by tracing them through several thousand texts and inscriptions, wherever they occurred, and deducing the meaning from the sentences in which they appeared. This task, seemingly so tedious, was aided by the peculiar construction of the hieroglyphs, where every word which is not purely abstract in meaning consists of two portions—hieroglyphics to represent its sound, followed by hieroglyphics to express its general or specific meaning. Provided with these materials the inquiry advanced; and the discoveries of Young and Champollion—the traditions of whose activity have been carried on by such successors as **Deveria**, **Bunsen**, **Bird** (*q.v.*), **Lepsius**, **Rosellini**, **Brugsch**, **Renouf**, **Goodwin**, **Lenormant**, **Chabas**, **Eisenlohr**, **Lieblin**, **Westley-Gibson**, **Budge**, and other eminent scholars—have resulted in so much valuable information respecting the ancient kingdom of Egypt as to throw into the shade the

meagre accounts transmitted to us by the classic writers concerning times and people with whom they were themselves but imperfectly acquainted.—The **science of Egyptology**, which at first had been received with very qualified and partial favour, has firmly established itself in the minds and convictions of conscientious inquirers; and in 1805 it received an undisputed corroboration from the discovery, by **Professor Lepsius**, of a bilingual tablet, Greek and hieroglyphic, at **San**, the ancient **Zaan** or **Tanis**. This second inscription, so confirmatory of previous researches, is a decree in honour of **Ptolemy Euergetes I.**, by the priests of **Canopus** (B.C. 239), set up by order of the Synod in the temple of Tanis, containing an inscription of thirty-seven lines of hieroglyphics translated by seventy-six lines of Greek writing, and conveying a considerable amount of new information, especially as regards geographical names. Experts are now able to read the important historical inscriptions found at **Mount Sinai**, and in all parts of the land of Egypt. The mythology, history, science, and literature of the ancient Egyptians are now spread open before us; having received so much additional light from the continual researches carried on in this country and abroad, as to render it extremely probable, if not absolutely certain, that before many years have elapsed, the inquiry will have virtually closed for all points except the details of philology.—It is one of the marvels of Egypt and its early civilisation that it starts already full grown into life in the valley of the Nile, as a nation highly advanced in language, painting and sculpture, and offers the enigma as to whence it attained so high a point of development. There is no monumental nation which can compare with it for antiquity, except perhaps **Babylonia**; and evidence is yet required to determine which of the two empires is the older. The **arts** of Egypt exercised an all-powerful influence on the ancient world: the **Phœnicians** copied their types, and Greece adopted the early Oriental style of architecture, for the **Doric** style came from Egypt, the **Ionian** from Assyria, the later **Corinthian** again from Egypt. If Phœnicia conferred an alphabet on Greece, Egypt suggested the use of such characters to Phœnicia. Already, in the seventh century B.C., the hieroglyphs represented a dead form of the Egyptian language, one which had ceased to be spoken; and Egyptians introduced a conventional mode of writing simpler than the older forms, and better adapted for the purposes of vernacular idiom. Egyptian philosophy—the transmigration doctrine of **Pythagoras**—that of the immortality of the soul of **Plato**—pervaded the Hellenic mind from the colleges of **Thebes**. The wisdom of the Egyptians was embodied in ethical works of proverbs and maxims as old as the Pyramids, and as venerable for their hoar antiquity as the days of the Exodus. The frail **papyrus**, the living rock, the temple, and the tomb, have all preserved an extent of literature found nowhere else. The motive was a religion which looked forward to an eternal duration, or the return of the past to the future. The national psalm of **Pentaur** is found on the walls of Thebes, and the papyrus of **Salhier**. The **Book of the Dead** was alike sculptured on the tombs and written on the roll; it embodied much of the symbolic, though less of the esoteric doctrine. The **Elysian fields**, the streams of

Styx, burning **Phlegethon**, the judges of the dead, are Egyptian conceptions; the **Sun-worship** is Egyptian; medicine and astronomy, geometry, truthful history and romantic fictions are found in the extensive literature. Many dogmas and practices of an Egyptian origin have descended to the present day, and exercise more influence than is generally supposed on modern religious thought. (Consult Dr. Birch's Preface to the second edition of Bunsen's "Egypt's Place in Universal History"; Preface to second volume of "Records of the Past"; Inaugural Address in "Transactions of the Second Session of the International Congress of Orientalists"; Introduction to the Study of the Egyptian Hieroglyphs, in Sir J. Gardner Wilkinson's "Egyptians in the Time of the Pharaohs"; "Egypt from the Earliest Times to B.C. 300"; Rede Lecture on the "Monumental History of Egypt"; Sir J. Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians"; Lenormant and Chevalier's "Manual of the Ancient History of the East"; Dr. E. Richmond Hodges' "Egyptian Hieroglyphics and their Decipherment," in the third edition of Cory's "Ancient Fragments"; Rev. A. H. Sayce's "Fresh Light from the Ancient Monuments"; Mr. E. A. W. Budge's "Dwellers on the Nile"; etc. etc.)

Eisteddfodd is the name given to an annual bardic congress in Wales, having for its objects the encouragement and preservation of the music and general literature of the Principality, the maintenance of the Welsh language, in order to keep up the ancient national customs, and to stimulate and foster the spirit of patriotism among the people. Its origin is lost in antiquity, and the Eisteddfodd in its present form dates from the close of the fourth century. About that time the laws peculiar to this national congress were remodelled and codified, and its motto "Y gwir yn erbyn y byd" (The truth against the world) given to it. About this time "chairs" were also established, in order to afford a preliminary training for the bards and disciples prior to the Eisteddfodd. Four of these chairs at present exist in Wales. Throughout the last century this ceremonial languished greatly, but was revived about seventy years ago. Now, and for many years past, it is annually celebrated on a scale of great magnificence, and is under the patronage and support of the nobility and gentry connected with Wales.

Eldon, John Scott, 3rd Earl of (creat. 1821), was b. 1845, and succeeded his father in 1854. The 1st peer for nearly twenty-five years filled the office of Lord Chancellor.

Electricity (from Gr. *elektron*, amber). A powerful physical agent which manifests itself mainly by attractions and repulsions, but also by luminous and heating effects, by chemical decompositions, and many other phenomena. Electricity is produced in matter by a variety of causes, among which the chief are friction, pressure, contact, chemical action, heat, and magnetism. The distinction between statical or frictional and dynamical or voltaic electricity has now almost disappeared. From the point of view of practical application the so-called dynamical electricity is the more important. A current of electricity, or a quantity of electricity moving at a certain rate in a conductor, can be produced by three different forms of energy: (1) In a galvanic battery chemical affinity is transformed into electricity; (2) In thermo-

electric piles heat is directly converted into electricity; and (3) Work is transformed into electricity in electro-dynamic machines, and these are either magneto-electric or dynamo-electric. A **galvanic battery** consists of a vessel containing two metallic plates immersed in a liquid, one of which, when they are joined together by a wire outside the cell, is dissolved and an electric current simultaneously flows through the wire. The solution of a metal in a liquid is accompanied by a definite evolution of heat, but in a battery part of this heat only is evolved in the cell, the rest appearing in the form of electrical energy. As, however, the cost of reduction of ores to the metallic state is considerable, it is found more economical to convert the heat obtained by the combustion of some cheaper forms of fuel into electrical energy. **Thermo-electric batteries** and **piles** consist of a series of couples of metals in contact with each other, and so arranged that every alternate contact can be exposed to a high temperature, whilst the others are kept cooled by a current of air or by immersion in water. If the two terminal metals be now joined by a wire, an electric current will flow through it, which will be more intense the greater the number of pairs of metals and the greater the difference between the two temperatures. At present these first two methods for producing an electric current have been surpassed by the third method, depending on the fact that electrical currents are produced in a coil of wire, when another wire through which a current is flowing, or a magnet, is brought to or away from it. (For a description of this method and its uses see **DYNAMO**.) A current of electricity when flowing through a wire meets with a certain amount of opposition; this opposition is diminished when the diameter of the wire is increased and when the length of wire is shortened, and is called electrical resistance. The absolute resistance of unit length and unit section of wires of different metals is different, so that each metal has its own specific resistance. Copper has a low specific resistance, German silver a high one; copper is therefore used for conducting wires, and German silver for resistance coils. The name given to the electrical unit of resistance is the **ohm**. An electrical current also depends on the electromotive force, or difference of electrical **potential** or energy between the two ends of the wire. This difference of potential is measured by electricians in units termed **volts**; and the unit current or **ampère** is that current which is produced by a difference of potential of one volt in a resistance of one ohm. The amount of work which a current can do is proportional to the current flowing, or quantity of electricity present, and to the difference of potential. This can be well illustrated by a cistern of water, where the weight of water is comparable to the quantity of electricity and the height of the cistern to the difference of potential. A **joule** is the unit of electrical work. When a current is flowing in a circuit whose resistance is not uniform, in those parts where the resistance is highest heat will be developed. This fact is utilised in **incandescent lamps**, which consist usually of a thin film of carbon in an exhausted globe, which offers a great resistance to the current brought to and from it by thick copper wires, and so becomes white hot. In "arc" lamps

the current, in passing from one carbon pole to the other, has to overcome the resistance of the air, and produces a spark which raises the temperature of the carbon terminals. Within the last few years a method of storage of electricity in **accumulators** has been brought before the public, and by it the laying of long conducting wires is obviated. The method depends on the fact that a powerful electric current can "electrolyse" or decompose many chemical compounds, and that under certain conditions the products of these decompositions will recombine slowly and give out a strong current of electricity. The accumulator in common use consists of two lead plates coated as thickly as possible with a paste of red lead and water; the two plates are separated by a piece of felt, and the whole system rolled together. On passing a strong current through such a cell, lead peroxide is formed on one plate and metallic lead on the other. The cell so charged can be carried from place to place, and on joining the two terminals a powerful current will be produced, which gradually runs down; the cell is then ready to be charged a second time, and so on.

Electricity, Atmospheric. See METEOROLOGY.

Electric Search Light. See NAVY, BRITISH.

Electrotypes. See ENGRAVING, AUTOMATIC.

Element. See ATOMS AND MOLECULES.

Elementary Education Acts, 1870-80.

These Acts contain all the statute law regarding the public provision of elementary education in England. The administrative area for the purpose of elementary education is either the borough or the parish. Any area may have a school board if those who would have votes for a school board apply to the Education Department; and any area must have one if the school accommodation already provided is not sufficient. The board is elected outside the Metropolis by the burgesses of the borough or the ratepayers of the parish; within the Metropolis by those who would be entitled to vote for common councilmen in the City of London, or for vestrymen in other districts. Each voter has as many votes as there are members to be elected, and may give them all to one candidate. Outside the Metropolis the school board must number not less than five, nor more than fifteen. Members hold office for three years. In any area in which there is no school board there must be a school attendance committee, of not more than twelve nor less than six, annually appointed out of their own number, by the town council if it be a borough, or by the guardians of the union if it be a parish. The school board, or school attendance committee, must see that every child of school age receives sufficient elementary instruction in reading, writing, and arithmetic, and that no person employs (a) any child under the age of ten years; (b) any child under the age of fourteen years who has not obtained a certificate of proficiency (unless such child comes under the provisions of the Factory and Workshops Act, 1878). The school board, moreover, is to provide for any deficiency of school accommodation, and for that purpose has powers of compulsory purchase. It may establish a free school anywhere within its district, having first satisfied the Education Department that such a school is needed. It may contribute to, or, with the consent of the Education Department, establish an industrial school. It may take

over, upon certain conditions, any elementary school already established in its district. A parent who is unable to pay the school fees may apply to the guardians of the poor, and if he prove his inability they are to pay the fees without his thereby incurring any disqualification. All fees, parliamentary grants, sums borrowed, etc., must be carried to the school fund, out of which all expenses are to be defrayed, and any deficiency be met out of the rates. The school board is to serve on the rating authority its precept requiring payment of a sum therein specified, which the rating authority must pay to the school board treasurer. Should the rating authority make default, all its rating powers may be exercised by officers appointed for that purpose by the school board. No religious catechism or formulary distinctive of any denomination is to be taught in a board school, nor is a child to receive any religious instruction contrary to the wish of his parent, nor is a Government Inspector to examine any child in any religious subject. For other provisions see text of Acts. A **Royal Commission** is now engaged in inquiring into all matters referring to Elementary Education, and their report will probably be issued in time for the revision of the Code of 1887. The **Code for 1886** is altered but little from that of 1885, the changes referring chiefly to night schools, cookery, the position of teachers, and their pensions. New regulations respecting drawing are given for the first time in the Code.

Elgin and Kincardine, Victor Alexander Bruce, P.C., 9th Earl of (creat. 1633), b. 1849. Sits as Baron Elgin, with the second title of Baron Bruce, Treasurer of the Household (1886).

"Eliot, George." See NOMS DE PLUME.

Ellenborough, Charles Edmund Towry Law, 3rd Baron (creat. 1802), was b. 1820, and succeeded his uncle 1871.

Ellesmere, Francis Charles Granville Egerton, 3rd Earl of (creat. 1846), was b. 1847, and succeeded his father 1862.

Elliot, The Hon. Arthur Ralph Douglas, M.P., M.A. (Cantab.), son of the Earl of Minto, was b. 1846. Educated at Edinburgh Univ. and Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1870). Returned in the Liberal interest as member for Roxburghshire (1880-85); re-elected 1885.

Elliot, The Hon. Hugh, M.P., third son of the Earl of Minto, was b. 1849. Educated at Eton and Cambridge. Formerly a clerk to the House of Commons, and secretary to the late Mr. Adam when First Commissioner of Works. He is a barrister-at-law, Deputy Lieutenant for the county of Fife, and J.P. for the county of Ayr. Returned in the Liberal interest as member for North Ayrshire (1885).

Ellis, Mr. A. J. See SPELLING REFORM.

Ellis, Mr. James, M.P., was b. 1829. Is a quarry proprietor. Chairman of the Leicester School Board. Returned in the Liberal interest as member for West Leicestershire (1885).

Ellis, Mr. John Edward, of the Park, Nottingham, was b. 1841. Educated at the Friends' School, Kendal. Chairman of the Nottingham Joint Stock Bank (Limited). Is J.P. for the borough of Nottingham and the North Riding. Returned in the Liberal interest as member for Rushcliffe Division of Notts (1885).

Ellis, Sir John Whittaker, M.P., was b. 1829. Elected Alderman of London (1872). Appointed Sheriff (1874). Lord Mayor (1881-82). He is Lieutenant for the City of London, mem-

ber of the Court of the Merchant Taylors' Co., and Chairman of the Alliance Bank. Returned in the Conservative interest as member for Mid Surrey (1834-35); Kingston Division (1835).

Elphinstone, William Buller-Fullerton—**Elphinstone**, 15th Baron (creat. 1500), was b. 1725, and succeeded his cousin 1861. A Lord-in-waiting to the Queen (1874-80), to which post he was reappointed (June 1885 to Jan. 1886); has been a representative peer for Scotland since Nov. 1867. The 13th Baron held high command in India, and while Governor of Bombay distinguished himself greatly during the Sepoy mutinies of 1857.

Ely, The Rt. Rev. Lord Alwyne Compton, D.D., Bishop of (founded 1108), brother of the present Marquis of Northampton, was b. 1825; educated at Trin. Coll., Cambridge; Rector of Castle Ashby, Northamptonshire, Hon. Canon of Peterborough Cathedral (1856); Rural Dean of Preston and Archdeacon of Oakham (1874); Dean of Worcester (1879); Installed (1880).

Elysian Fields. See EGYPTOLOGY.

Emigration Returns for 1884 and 1885 (ending Nov. 30th).

Nationalities.	United States.		British North America.		Australasia.		All other Places.		Total.	
	1885.	1884.	1885.	1884.	1885.	1884.	1885.	1884.	1885.	1884.
English	70,626	80,485	14,583	23,218	26,439	28,864	8,638	9,263	120,286	141,830
Scotch... ..	12,665	12,376	2,325	3,163	4,504	4,661	944	999	20,438	21,199
Irish	49,671	58,417	2,648	4,468	5,958	7,597	368	493	58,845	70,975
British Total ...	133,162	151,278	19,556	30,849	36,901	41,122	9,950	10,755	199,569	234,004
Foreigners	45,142	47,379	3,054	5,859	1,239	1,575	2,378	1,875	51,813	56,688
Nationality not distinguished	15	33	—	43	—	30	2,742	3,621	2,757	3,727
Gross Total ...	178,319	198,690	22,610	36,751	38,140	42,727	15,070	16,251	254,139	294,419

Emly, William Monsell, P.C., 1st Baron (creat. 1874); b. 1812. President of the Board of Health (Feb. till Sept. 1857); Vice-President of the Board of Trade (1866); Under-Secretary of State for the Colonies (Dec. 1868 to Dec. 1870); Postmaster-General (Dec. 1870 to Nov. 1873); M.P. for co. Limerick (Aug. 1847 to Jan. 1874).

"Emperor, The." See FIRE AND LIFE INSURANCE.

Employers' Liability Act, 1880. Before the passing of this Act, a master was not liable to his servant for injury caused by the negligence of a fellow-servant. The Act provides that where injury has been caused to a workman by reason of any defect in the works, machinery, etc., or of the negligence of any person in his employer's service intrusted with superintendence or with authority over the injured man, or of any act or omission done or made in obedience to the orders or byelaws of the employer, or of the negligence of any person in charge of railway signals, points, etc.; the injured workman, or if the injury results in death, his personal representatives, shall have the same right of compensation against the employer as if he had not been

Ely, John Henry Wellington Graham Loftus, 4th Marq. of (creat. 1800); Baron Loftus, 1801, by which title he holds his seat in the House of Lords; was b. 1849, and succeeded his father 1857.

Embryology. The study of the development of a living being from the simple ovum or egg to the adult form. Only of late years has this engaged the serious and consecutive attention of scientific men. Their investigations have resulted in the confirmation of the Darwinian idea as to the origin of species (*q.v.*) and in the establishment of the generalisation that the life of any individual is an epitome of the life of the forms through which it has evolved. (To give all the books of reference is impossible, but Gegenbauer's "Text-book of Comparative Anatomy," Sachs' "Text-book of Botany," Michael Foster's "Physiology," and F. M. Balfour's works, will repay consultation for details, and for references. Agassiz is publishing in the form of atlases a selection from various monographs on the embryology of particular animals.)

in the employer's service. Certain exceptions are made, to protect an employer morally innocent of the injury. An action under the Act must be brought within six months from the time of the accident, or twelve months from the time of death, as the case may be, and notice that injury has been sustained must be given within six weeks. The compensation recoverable is not to exceed the equivalent of three years' earnings of a person in the same employment and district. Any money payable by the employer to the workman as a penalty under any other Act of Parliament is to be deducted from the compensation recovered under this Act. Actions under the Act are to be brought in the county court, but may be removed into a superior court in the same manner as other actions. The Act came into operation on January 1st, 1880, and remains in force seven years.

Enchorial Writing. See EGYPTOLOGY.

Enclosure of Commons. See LAND QUESTION, THE.

Endowed Schools Acts, 1869, 1873, 1874. These Acts were designed to render useful certain old endowments for purposes of education. They apply with specified exceptions

to all endowed schools which are not elementary, and authorise the Charity Commissioners, upon inquiry, to make schemes for reorganisation. Such schemes are not to interfere with any endowment given within fifty years before the commencement of the principal Act, or with the constitution of the governing body of any schools belonging to cathedral or collegiate churches, or of any school whose governing body is under the jurisdiction of the governing bodies of the Quakers or Moravians. A scheme must include a conscience clause for the scholars, a provision that no governor shall be disqualified on account of his religious opinions, nor any master on account of his not being in holy orders, and a provision for the dismissal at pleasure of any master or other officer. It may provide for the transfer to the Queen of the duties of visitor. When a scheme has been prepared, the Commissioners are to send printed copies of it to the governing body and head-master of the school affected, and are to allow two months for objections and suggestions. They may then hold an inquiry, and after holding it and considering objections and suggestions, if any, are to refer their scheme to the Education Committee of the Privy Council. If it be not approved, the Commissioners may amend it, or frame a new one, and the governing body have a second opportunity of making alternative proposals. But if it be approved, the Education Committee are to publish it. Within two months after publication, the governing body may, on any one of certain specified grounds, appeal to the Judicial Committee of the Privy Council. If an appeal be made, the scheme, after hearing, may be remitted to the Commissioners, or it may be ordered to be laid before Parliament. If no appeal be made it need not be laid before Parliament. In any case it must be finally approved by the Queen in Council, and takes effect either from a date specified therein, or from the date of such approval. An amendment to a scheme goes through a similar process. Schemes have been made and approved for most of the schools which come within the purview of the Acts.

Energy, Laws of. Energy is a condition of matter which confers upon it the power of overcoming resistance or of doing work. When work is done upon a body, energy is used up and transferred to the body upon which the work is performed. Thus, when a piece of soft iron is hammered, the energy of the living organism is transformed into heat, and the iron may be made red hot. There are various forms of energy. **Kinetic energy** is that which is due to motion—e.g., the energy of a rifle bullet, or of any heated or electrified body. **Potential energy** is that which is due to a body being in a position of advantage with respect to a force,—e.g., the spring of a watch, a head of water, or any mass at a height above the earth. An oscillating pendulum has alternately kinetic and potential energy: all its energy is kinetic when it is at its lowest point, and all of it is potential when it is at its highest point. The total quantity of energy in the universe, kinetic and potential, is invariable; this is the first law of energy, and is called the law of the **Conservation of Energy**. Whenever any kind of energy disappears, an equivalent quantity of some other kind is generated; this is called the law of the **Transmutation of Energy**. All kinds of energy have a tendency to become

transformed into the energy of heat; heat becomes diffused through matter, which thereby assumes an equable temperature. In order to get heat transformed back again into other forms of energy, it is necessary to operate with bodies which are at different temperatures, as in the case of a steam engine. The conclusion derived from these considerations is that the ultimate fate of the universe is to become converted into a lifeless, equally heated, and apparently inert mass of motionless matter, devoid of all available energy. This is the third law of energy, and is called the law of the **Dissipation** (or rather of the **Degradation**) of Energy.

Enfield, Viscount. See STRETFORD, BARON. **Engineering.** In this article are given details of several of the great industrial engineering schemes either in progress or planned out in different parts of the world at the present time (March 27th, 1886):—

Antwerp Quays.—King Leopold formally inaugurated the improvements at this ancient port in July 1885; and Antwerp, which has made more rapid progress than any other seaport in the world within recent years, is now recognised as the sea-going emporium for the north-western side of Europe. The work thus completed involved operations in the river Scheldt, opposite the city, to bring it to a uniform width of 350 metres, and to construct on the city side a new quay over two miles in length and 100 metres broad, enabling no less than 50 steamers of 3,000 to 3,500 tons burthen to be berthed alongside at the same time. MM. Couvreur and Hersent, of Paris, the contractors, commenced operations in 1877; the estimated expense, which it was soon thought would be exceeded, being 38,000,000 francs, besides 18,000,000 for expropriations. The trade of Antwerp from 1873 to 1883 increased in tonnage sixteen-fold. In 1884 there was, according to the British consular returns, a slight falling off as compared with 1883: arriving tonnages, 3,427,021 against 3,788,095; and departures (vessels), 4,084 against 4,325 in 1883.

Birmingham and London Canal.—This is a scheme to widen and deepen the Grand Junction and Birmingham and Warwick Canals between London and Birmingham to admit barges of from eighty to one hundred tons the whole length, to be either propelled or towed by steam. The work would involve the reconstruction of nearly two hundred miles of waterway, with about one hundred locks. The present rate of carriage—about 12s. per ton for iron—it is stated, would be reduced one-half; and this is against the 15s. per ton charged by the railway companies.

Burmah and Siam Railways.—Since the whole of Burmah became, on January 1st, 1886, a portion of the British dominions, considerable attention has been, and will be, directed to the network of railways as proposed by the engineer-explorers, Messrs. A. E. Colquhoun and H. S. Hallett. Two lines are already in existence—running northward from the chief city, Rangoon, one to Promé, and the other to Toungoo. They are each 162 miles long and of metre gauge; the first named was opened in 1877, and pays 6 per cent.—although the charges are very low, third-class passengers paying only about a farthing per mile—and the latter was opened in 1885. From Toungoo it is suggested to extend the line still northwards, to Mandalay (the late native capital), 230 miles;

thence to Bhamo, on the Chinese frontier, 200 miles, and from this point to the north-west to a junction with our Indian railway system 250 miles farther—our lines in India, however, not being of the same gauge. The Siamese have let it be understood that they would look favourably upon railway construction if they could be brought into connection with Moulmein, an important British port in the Tenasserim portion of the old Burmese territory. It is proposed to make a line from Bangkok, the capital of Siam, on the coast, northerly to Raheng, 275 miles, thence to Kiang Hsen, 300 miles, all in Siamese territory, and thence 250 miles farther through the Burmese Shan States to the borders of China at Esmok. Now, Raheng lies 160 miles east of Moulmein, and it is proposed to connect these two points by railway, half being in British and half in Siamese territory; thus meeting the wishes of our Eastern neighbours, and making Moulmein a port for both Siamese and Chinese trade. But it is further suggested to connect the two lines at Rangoon with Moulmein by a line 125 miles long; this link, perhaps, being the crowning piece of the whole work. If the scheme be carried out in its entirety, the uttermost parts of India will be brought into connection with the whole of Burmah and Siam, the Chinese frontier—and its possible railways—being touched at two points. There are no insurmountable physical difficulties, and the total cost is calculated as follows: English system, including the Rangoon-Moulmein line and half way to Raheng, 885 miles; Siamese system, including Shan States to borders of China, 905 miles; total, 1,790 miles, which at £8,122 per mile, an average taken from data obtained from the existing Rangoon railways, gives an aggregate cost of £14,538,380. This immense outlay, it is believed, would open up incalculable floods of commerce through thickly populated countries. On the Chinese borders, near the points touched by the railways, are a range of provinces with an aggregate of 38,000,000 of people, who have not a railway amongst them. Then there are the teeming millions of Burmah, and the rich country of Siam. The liveliest interest in the scheme has already been exhibited by British chambers of commerce; and it has been suggested that Messrs. Colquhoun and Hallett, whose labour was voluntary in the matter, should receive some national recognition of the value of their services.

Canadian Pacific Railway.—This line was opened throughout in November 1885, when the first train ran through from Atlantic to Pacific. It traverses the continent through British North America. Beginning at Montreal, where it communicates with the systems of the old provinces and the United States, it proceeds to Ottawa; thence round the north of the Great Lakes to Port Arthur, at the head of Lake Superior; from that point to Winnipeg, Manitoba; thence through the North-west Territory to Stephen, in the Rocky Mountains; and through British Columbia to its western terminus, **Port Moody**. The whole distance from Montreal to Port Moody is 2,898 statute miles. The first train ran at the rate of 24 miles per hour. It is said that a traveller will be able to leave Liverpool and arrive at Port Moody in a fortnight, a distance of 5,941 miles. Branches to the main line are being surveyed and constructed.

Channel Tunnel.—The project of connecting

England with the Continent by some permanent means has long been a subject of interest to both scientists and commercial men. Many years ago the scheme took the form of a tunnel, to be constructed from the north side of Dover harbour to a point north of Calais. This fell into abeyance, however; and it was not till Sir Edward Watkin, M.P., chairman of the South Eastern Railway Company, took the matter up that the affair really assumed definite form. But about the same time another party of projectors had formed themselves into a company, with Lord Richard Grosvenor, M.P., at their head. Without coming exactly into conflict, the rival concerns were proceeded with, that one having the benefit of Sir E. Watkin's advice and great railway influence making rapid strides, and, being to some extent identified with the South-Eastern Railway Company by a purchase of shares by that Company. A shaft was sunk a short distance to the south-west of Dover, beyond Shakspeare cliff, and also at the Calais end, and the boring from each side proceeded in a highly satisfactory manner, even during the time that a joint committee of both houses of parliament (1883) was sitting to consider the bill. Evidence of the most conflicting character was given before this committee. The Duke of Cambridge and Lord Wolseyley stated that the existence of the tunnel would cause the maintenance of a larger force of armed men in the Dover garrison, and the construction of an enormous fort. Scientists urged that the tunnel, if necessary, could be made impassable to an invading army in a few minutes; while commercial men pleaded the obvious advantages of being able to consign goods direct by rail to the Continent. The committee divided (July 10th, 1883), four being in favour of the scheme and six against it; and subsequently, Mr. Chamberlain, the President of the Board of Trade, announced that if the project were proceeded with the Government would oppose it. The works, although kept in order, have never been resumed. The project, however, is again to be brought before parliament in the session of 1886. A bill is to be brought in "to enable the South-Eastern Railway Company and the Submarine Continental Railway Company, and any other body or company to maintain, enlarge and extend for experimental purposes the existing shafts and borings already executed by them upon the foreshore at Hougham, Kent, and in, through and under the bed of the Straits of Dover, with a view to ascertain and determine the practicability of making and maintaining a tunnel for railway purposes beneath the Straits of Dover between England and France." The bill also provides for the transfer of the tunnel to the Lords of the Treasury within ten years, at the option of the latter; also enabling the South-Eastern Company to raise capital for the scheme, and to increase the amount that Company has been allowed to expend thereon. On Jan. 1st, 1886, it was announced that the Board of Trade had intimated to the promoters of the Channel Tunnel, that if their bill were persevered with, the Government would oppose it. A special general meeting of the S.E.R. Co. and the Submarine Continental Railway Co. was held March 19th, 1886, and passed a resolution approving the bill.

Congo Railway.—At the end of 1885, it was announced that the Government of the Independent Congo State had granted a concession

Mr. H. M. Stanley (*q.v.*) the explorer, and **Mr. J. F. Hutton**, M.P., President of the Manchester Chamber of Commerce, acting on behalf of the Congo Railway Syndicate, for the construction of a line to connect the Upper and the Lower Congo, taking the traffic of the Congo basin. Many distinguished names are attached to the scheme, and it was arranged that subscription lists for capital, estimated nominally at two millions sterling, should be opened in the capitals of the fourteen powers which at the Berlin Conference agreed to maintain the neutrality of this region. From the base to Stanley Pool is a distance of 343 miles, with a gap of 88 miles of waterway; but it is intended to ultimately avoid this by a circuitous route of 90 miles.

Corinth Ship Canal.—The first sod of this canal across the Isthmus of Corinth was turned by the King of Greece in April 1882. The scheme of making a passage through the isthmus is of very ancient date, the Roman Emperor Nero being credited with some such design. **General Turr**, known for his connection with similar enterprises, is said to have originated the present plan, and in May 1881 he obtained a concession from the Greek Government for the purpose, the idea being so well received that the capital was assured five times over. The isthmus is about 3½ miles in breadth, there being a backbone in the middle 120 to 180 feet high, which is approached on each side by a plain from the sea-shore. The engineers, Messrs. Gerster and Kander, decided to excavate and deport to the neighbouring plains all ground above 150 feet high, and to blast downwards through the remainder. The total amount of earth to be removed was calculated at ten million cubic metres, and the whole cost at about thirty million francs. The range of hills is composed of light tertiary chalk, containing large quantities of oyster shells; and the shafts sunk, it is supposed by Nero, were found to be of much use in disclosing the nature of the strata, and were actually worked upon in some instances. It is calculated that the length of passage saved from the Ægean to the Black Sea will be from 100 to 250 miles, and the dangers of the southern Greek coast will be thus avoided. A port and harbour will exist at each end of the canal.

Cronstadt Ship Canal.—St. Petersburg was converted into a port on May 27th, 1885, by the opening of this canal from Cronstadt. The waterway is 17 miles long, 180 to 240 feet wide, and 22 feet deep.

Euphrates Valley Railway.—Projects for shortening the journey to India by means of a railway along the valley of the river Euphrates have been repeatedly brought before the notice of the public during the last thirty years. The rival routes probably number a score; but the general principle of them all is the same,—they start from some port or other in the Mediterranean, opposite Cyprus, and terminate at Busra, Bushire, Grain, or some other port on or close to the Persian Gulf. Between the Mediterranean and the Persian Gulf some schemes provide for a railway on one side of the Euphrates, and some favour the other. Several, again, prefer the course of the Tigris, a river running to the Persian Gulf almost parallel with the Euphrates. Associated with what we may call the Euphrates Valley railway scheme pure and simple is an elaborate project for extending it at one end to Constantinople,

to touch the European railway system, and pushing it on at the other through Persia and Beluchistan to India. This would render it the direct railway route between London and Calcutta. However, this scheme, although influentially supported at various times, has been completely cast into the shade by the Russian railway to India, which is being constructed from the Caspian. While only a few hundred miles of line are needed to extend the Russian railway to the Indian network, thereby providing railway communication from London to Calcutta, two or three thousand miles would have to be constructed to carry out the project of a line from Constantinople to India, to which we have above referred. A further objection to this line in its entirety is, that in time of war the railway through Europe from Calais to Constantinople would be closed to our troops, and the section immediately beyond the Turkish capital liable to be cut by the Russians. On this account impartial English strategists prefer commencing the railway communication with India opposite Cyprus, which island would protect the starting point; and this will explain the great strategical value of Cyprus. Should Russia force on her railway through Afghanistan, and bring about a junction of the Russian and Indian railway systems, a quicker means of sending reliefs to India would have to be found than that *via* the Suez Canal. In that case the Euphrates Valley railway would come very prominently to the front, and statesmen would doubtless advocate extending it also from the Persian Gulf to Pishin. The length of the Euphrates Valley railway, from Alexandretta on the Mediterranean to Grain on the Persian Gulf, would be 920 miles, and cost about £8,000,000 to construct. Some of the other routes are said to be cheaper, particularly that advocated by Commander V. Lovett Cameron, who explored the country a few years ago.

Forth Bridge.—The greatest work of its kind in the world. The construction is still in progress. The main feature will be the extraordinary spans, for a rigid structure, of a third of a mile in length, each of which is made by two cantilevers of 680 feet long, united by 350 feet of girder. When finished the structure will carry the railway high above the sides of the valley of the Forth, the piers indeed being nearly the height of St. Paul's Cathedral. Sir John Fowler and Mr. B. Baker, C.E., are the engineers, and the work has progressed from the first without serious mishap. Last year (1885) one of the caissons used for securing a foundation was tilted a little, but this was floated safely in October and removed to its proper position; furthermore it was stated that a serious calamity had occurred to the Italian workmen employed at the bottom of the caissons, but this proved to be untrue. It seems that the reason why Italians are employed at this work is because of the temperature—there no doubt being other considerations, however—indeed, they do not consider it necessary to leave the caisson even when blasting rock at the bottom, the air pumped in from above and the escape underneath supplying their needs in this respect. To provide against emergencies an infirmary has been erected. At the end of 1885 the work was well advanced. At North Queensferry all four main piers were ready for the superstructure; the two north piers at Inch Garvie, and three at South Queensferry; and the work of the super-

structure had also been carried on. It was estimated that 254,000 feet of granite had been set, 84,720 yards of concrete and rubble masonry, and 15,000 tons of cement; 2,300 lineal feet of tubes of 12 feet diameter have been drilled, and 2,000 lineal feet of 8-foot tubes; of the lattice tension members 3,300 lineal feet were ready for erection, and the top junctions of **Fife and Queensferry** were about half finished; 18,200 tons of steel had been delivered at Queensferry, including 2,500 tons of viaduct spans. It may be added that it is calculated that the wind pressure will not be more than 56 lb. per foot, amounting to 2,600 tons on one span, and the rolling load 600 tons, not more than two trains being allowed on any part of the bridge at the same time. It is considered that these stresses are far more than provided for. About 2,000 men are employed at the works.

Hell Gate, New York Harbour.—On Oct. 10th, 1885, the Flood Rock in this range of dangerous reefs was blown up by means of 270,000 lb. of explosive, which had been placed in holes drilled over a space of nine acres. A young lady of eleven years of age pressed a button, which caused the discharge of the electric current, and an immense volume of water and fragments of rock rose to a height of nearly two hundred feet, a tremulous feeling being experienced ashore miles away. After the dredging operations, it is anticipated that the chief obstacle to the navigation in the East River will be removed.

London New Bridge.—Although the work has not been commenced, it is understood that the designs for a new bridge across the Thames east of the Tower, submitted by **Mr. J. Woolf Barry**, are to be acted upon. The architectural exterior, of a quaint design, is by **Mr. Horace Jones**, the City Architect, and the whole work will be carried out by these two specialists.

Manchester Circular Railway.—A scheme is being matured to encircle Manchester and Salford by a railway for both passengers and goods. The line is designed to be fourteen miles in length; and as twenty townships will be accommodated, including a population of considerably over half a million on the inner area, the projectors hope for success. The original designs are by **Mr. T. Barham Foster, C.E.**

Manchester Ship Canal.—This great engineering scheme, which is to convert the cotton metropolis, Manchester, into a seaport, was introduced in the shape of a parliamentary bill early in the session of 1883. The original project was, briefly, as follows:—To construct a new waterway for ocean-going steamers from the estuary of the Mersey, near Runcorn (which is above Liverpool), to Manchester, through two or three locks, and partly in the beds of the rivers Mersey and Irwell. The canal was to be about twenty-one miles long, independently of the channel made by widening and deepening in the estuary; and the variety and magnitude of the interests to be disturbed were at once apparent by the necessity of removing no less than five railway bridges (and of course diverting the lines) and a canal viaduct. At first the estimated cost was over £5,500,000 sterling, while the local interest felt in the scheme may be gauged by the fact that £59,000 was in the first instance subscribed to defray the parliamentary expenses; besides, the heavy parliamentary deposit of £227,347 was forthcoming in due course. The history of this bill at

Westminster will often be quoted by those who impugn the efficiency of the present method of private-bill legislation. There was, of course, the most strenuous opposition of the Liverpool interest, as it was feared that that port would suffer if the incoming and outgoing vessels were not docked in the Mersey; then the five railway companies were keenly anxious not to lose the Manchester carrying trade from Liverpool, the Bridgewater Canal trustees having similar reasons for opposing the project, especially with reference to their viaduct. The bill was passed by a House of Commons committee in 1883, and thrown out by the Lords; in 1884 it was passed by a Lords' committee, and thrown out by the Commons. Last year, however, in an amended form, it was passed by both Houses. During its chequered history, a committee expressed their willingness to pass the scheme if it were clear that the necessary sum would be guaranteed for carrying it through. The same evening a telegram was received from Manchester stating that this had been done on the local Exchange that day! It was stated towards the end of last year (1885) that arrangements had been made with the great house of Rothschild to "finance" the sum of five millions sterling, so that the work could go on without interruption. In December it was announced that the work of staking-out the new water-way had been begun. **Mr. Daniel Adamson, C.E.**, was the prime mover in the scheme, and is chairman of the Company. It is significant of the local interest in the matter, that in its earliest days a newspaper was floated to further the project. The promoters of the canal have a bill before parliament asking for power to pay interest out of capital during construction—thus reopening a much vexed question. The bill passed the second reading in the House of Commons March 9th, 1886. The Salford Corporation, too, have a bill asking to be allowed to take up £250,000 in shares.

Manchester (Thirlmere) Water Supply.—This great work has been commenced, the idea being to convey to Manchester the waters of Thirlmere, in the Lake district. The contracts for the first part were let towards the end of 1885, the first works consisting of some $5\frac{1}{2}$ miles of tunnelling and $1\frac{1}{4}$ miles of open cutting. The aqueduct is to convey 50,000,000 gallons of water daily. After leaving the tunnel, the aqueduct, it is arranged, will appear in the valley leading to Grasmore, keeping to the high land above Rydal and Windermere, and passing under Chapel Green, Nabscar, and Skelgill Wood. After crossing Troutbeck, the water, passing through inverted iron siphon pipes, covered with earth, will pass behind several residences by means of a tunnel, leaving Windermere railway station two miles to the east. Then the valleys of the rivers Kent, Lune, and Ribblesdale will be crossed by inverted siphon pipes, and the rivers by bridges, till the neighbourhood of Bolton is reached; when the water will pass through cast-iron pipes chiefly laid along main roads to the Manchester reservoirs. It is calculated that there will be nearly thirty-three miles of 40-inch cast-iron siphon pipes, nine miles of 36-inch piping, and about eighteen miles of 33-inch. It was announced at the beginning of 1886 that the Manchester Corporation had entered into arrangements with two firms for the supply of the pipes, one contract being of the value of £120,000 and the other

amounting to £110,000. At its inception considerable feeling was raised against thus invading the natural beauties of the Lake District; but it is stated that nothing more sightly than "a neat cottage" will be seen at the point where the water is drawn from the lake. Mr. James Bateman is the author of the work, and further details may be obtained from his book on the subject.

Marseilles Ship Canal.—It was stated at the beginning of 1886 that a proposal had been made by Dr. Louis Combet, Deputy Mayor of Lyons, to construct a canal from the important Mediterranean port of Marseilles along the shore to the mouth of the Rhone. It was added that the total cost would not exceed 50,000,000 francs, and that the return might be expected from the greatly diminished cost of sending goods across from the Mediterranean to the English Channel. A scheme of inland communication by canal between Havre, Rouen, Paris, Lyons, and Marseilles has often been mooted; and in 1881, it is stated, the General Council of the Department of the Bouches du Rhone adopted a resolution expressing their approval of a project which involved the carrying of a canal through a tunnel eight kilometres long. This suggestion came to nothing, however, owing to its obvious disadvantages.

Mersey Tunnel.—As its name implies, this is a passage constructed under the river Mersey, to connect the two shores at Liverpool and Birkenhead, for railway purposes. A bill was first obtained in parliament in 1866, and extension of time was granted in 1868. In 1870 a new bill was carried through, converting the pneumatic railway scheme at first suggested into an ordinary line of double rails; and a further extension was applied for in 1880, but shortly afterwards operations commenced. On Feb. 13th, 1885, the tunnel was formally opened; but, of course, much work had to be done before traffic could be commenced, and the actual inauguration was eventually fixed for the end of January 1886, when the Prince of Wales consented to perform that ceremony. The scheme is one of very considerable utility and importance, the local traffic across the Mersey between the two busy centres already mentioned demanding some such regular connecting link, to say nothing of the through carriage promised beforehand by the great railway companies. Besides the improved means of intercourse provided for a riverside population of about a million, the Mersey Railway enters the Central Station at Liverpool; and on the Birkenhead side of the river a junction is formed with the London and North-Western and the Great Western Railways (bringing the latter into direct communication with Liverpool for the first time), and with the Great Northern, Midland, and Manchester, Sheffield and Lincolnshire Railways. Further, the Wirral district south of Birkenhead, and the mining locality of North Wales (by means of the bridge over the Dee at Connah's Quay), thus finds direct access into the heart of the great port of Liverpool. The length of the tunnel, including the approaches, is 4½ miles. There are two stations in the city, a lift being used at one of them (James Street) calculated to raise 230 passengers to the road level in 40 seconds; on the Birkenhead side there are four. The height between the bed of the river and the roof of the tunnel is given as about 30 ft., the tunnel itself being 21 high and 26 wide.

Alongside the tunnel is the ventilation heading, 7 ft. 4 in. in diameter, and there are ventilating fans 40 ft. and 30 ft. in diameter. The work of construction was greatly aided by the fact that the ground was strong enough to sustain the tunnel without lining; but there are about seven courses of brickwork on the crown, and six on the invert. The centre of the river is 625 yards from either side, and the thickness of the arch, walls, and invert 2 ft. 3 in. to 3 ft., the bricks being set in cement. It may be added that 100 ft. below is the drainage heading driven to test the strata beneath the river. The Rt. Hon. H. Cecil Raikes, M.P. is chairman of the Company, Messrs. Waddell & Sons were the contractors, and Messrs. J. Brunlees, C. Douglas Fox, and J. Fox were the engineers. On the day of opening it was stated that the expenditure was £1,250,000 sterling. The passenger traffic by boat across the river has been estimated at £26,000,000 yearly.

Moselle Canalisation.—A scheme as yet "in the air." The idea is to make the river open to the navigation of larger ships for 190 miles; and locally, especially amongst those interested in the heavy trades of Westphalia, the project is said to meet with much favour.

Nicaragua Ship Canal.—On December 1st, 1884, it was announced in President Arthur's message to Congress that a treaty had been signed between the Government of the United States and that of the Republic of Nicaragua, in Central America, for the construction of a ship canal through the latter country as a connecting link between the Atlantic and Pacific Oceans. Nicaragua is one of the five confederated republics, and is situated south of Guatemala and north of Panama, on the isthmus which connects North and South America. According to this treaty the waterway was to be made by the engineers of the United States army from the plans of Mr. A. G. Menscal of the United States navy; it was to begin at the port of San Juan de Nicaragua, or Greytown, cut into the San Juan river above Rio Colorado, thence following the bed of the San Juan to the Lake Nicaragua. The lake being crossed, the canal was to be continued at the mouth of the river Del Medio, and thence to the Pacific at the harbour of Brito—in all 180 miles. As Lake Nicaragua, and sixty miles of the San Juan river were to constitute part of the projected enterprise, there were for actual construction only seventeen miles on the Pacific side and thirty-six miles on the Atlantic side. The new waterway, it was understood, was to be the joint property of the two governments concerned; and while guaranteeing the integrity of the Nicaraguans, the United States claimed the right to select the land route, as well as to make a railway as part of the canal. While a strip of land two and a half miles wide was to be reserved for the canal, and to be jointly owned, it was to be under the jurisdiction of Nicaragua, but the United States were to have free use of the land and water they required for construction purposes. A joint management of three each was to be appointed, while the United States would take two-thirds and Nicaragua one-third of the proceeds. Of course there were assurances from the Washington Government that there was no *arrière pensée* as to the future sovereignty of the present rulers of the land. On December 10th it was announced from Washington that the treaty had

been sent to the Senate; but on December 28th it transpired that there were difficulties in the way, and that at the secret sitting of the Senate an objection of England to this scheme, on the ground of an abrogation of the **Clayton-Bulwer treaty** (*q.v.*), had formed matter for discussion. The work was not undertaken in the terms proposed, and was last mentioned in President Cleveland's message to Congress on December 8th, 1885. After referring to the necessary interference of the United States during the recent war in Central America, he said that an attentive consideration of the **Nicaragua Canal Treaty** led him to withhold submitting it to the Senate. Their duty was to develop the resources of their own vast area, and he could not recommend propositions involving responsibilities beyond it. He, however, thought the general project of the canal ought to be encouraged.

North Sea and Baltic Canal.—Towards the end of 1885 it was announced that the German Government had decided upon constructing a ship canal to connect the German Ocean and the Baltic Sea. The *Berlin Post*, in referring to the scheme in an article which was reproduced in several London journals during the last week of 1885, stated that the waterway would be available for war and trading vessels of the largest size. The idea of uniting both German coasts by a canal running through Schleswig-Holstein, it was added, was a project of Wallenstein's, and was afterwards taken up by no less a personage than Oliver Cromwell, "who, when Protector, in close alliance with Sweden, aimed at securing to England by this enterprise the unity of the Protestant nations of Northern Europe." His plan was to leave the Elbe, and following the Eider, pass through the Lake of Schwerin, and enter the Baltic at Wismar. It was reported from Berlin, January 11th, 1886, that the bill had passed the first reading in the German parliament and been referred to a select committee, and that it was considered probable the scheme would be carried through.

Panama Canal.—This waterway, which, if completed, will be the greatest engineering work of the kind the world has ever seen, is designed to connect the Atlantic Ocean, from Aspinwall (or Colon), with the Pacific at the capital city of Panama—the oldest existing European settlement in the whole of America—thus cutting through the southern portion of the narrow neck of land connecting North and South America, generally described as the **Isthmus of Panama**. The idea is to follow the course of the single-line railway already connecting the two cities, except in certain places, where the bed of the river Chagrés will be more closely followed. The whole length, from entrance to exit, is calculated at fifty-four miles; and the two chief difficulties are recognised in the flood waters of the river, and the fact that the **Cordilleras** have to be cut through. The river bed is to be crossed several times, and it has been decided to cut through the **Culebra Col.** in the **Cordilleras**, which about the point chosen will mean the excavation of a lengthy ravine about 350 feet deep. The Chagrés is subject to very considerable variations, and moreover the rise and fall of the tides at each end of the canal are so dissimilar that it is expected the flow in the new waterway at certain hours may prevent the passage of ships. To meet this latter difficulty various

suggestions have been made, such as the construction of locks; but to provide for the former to some extent, an enormous dam or reservoir is to be erected at **Gambos**, near the influx of the river **Obispo**, 960 metres long at the base and 1,960 at the top, with a bottom width of 1000 metres and a height of 45 metres, forming the largest dyke in the world. Throughout the whole distance the bottom of the canal will be about 28 feet below the mean ocean level, width 72 feet at bottom and 160 feet at the top; in the mountain ravine the canal will be somewhat deeper, and narrower at the top. The project of cutting a way through the isthmus at some point, in order to shorten the journey from one great ocean to the other, was thought of in very early times, and has frequently been under the consideration of eminent engineers. The successful opening of the **Suez Canal** called the attention of the French to the matter, and an expedition of inspection, under Lieutenant Wyse, was sent out in 1876 by a Society which had General Turr at its head. In 1878 a concession was granted by the Government of the United States of Columbia to the **Civil International Inter-oceanic Canal Society**; and in 1879 **M. de Lesseps**, of Suez Canal fame, became connected with the scheme. The first meeting of the Company of the Inter-oceanic Canal of Panama was held in 1881, and the necessary capital was stated to be 600,000,000 francs, or £24,000,000, including cost of excavation, weirs, and dock and tidal gates. **M.M. Couvreur** and **Herment**, the contractors, began operations the same year. It was at first calculated that the quantity of earth to be removed would amount to 3,531,000,000 cubic feet; and up to January 31st, 1884, it was stated that not more than 118,448,595 cubic feet had been actually excavated. Still the progress of the work gained from the growing experience of the workers, and the application of the most modern machines and tools; and up to the middle of 1885 it was calculated that 18,000,000 cubic yards had been got out, while the number of men employed had increased to 20,000, from 11,000 in 1883; but the estimate of the mass to be removed had grown to a considerable extent. Unfortunately there seems to be no independent authority to inform the world of the progress of the enterprise at brief intervals. The United States press, as a rule, are opposed to the project, possibly in view of other schemes of their own. Thus, during 1885, the Government of Washington were called upon to interfere in Central America, where President Barrios of Guatemala endeavoured to annex Nicaragua, San Salvador, and Honduras, one plea being the importance of the isthmus in Nicaragua for ship-canal purposes. This matter came to an end by the death of Barrios and the termination of the war. Of course **M. de Lesseps** and his friends have enemies in their own country; and besides, there is the usual divergence in the opinions of experts as to the possibilities of the scheme. The canal interests are defended by the publication *Bulletin du Canal Inter-oceanique*. The most scathing criticism against the scheme has lately been published by **Mr. J. C. Rodriguez**, who in 1879 was commissioned by the *New York World* to study the prospects of the enterprise on the spot. At the close of the year (1885) the work was busily proceeding. On Jan. 5th, 1886, **M. Charles de Lesseps** left Paris for St. Nazaire, and **M. Ferdinand de Lesseps** prepared to follow

the story in connection with this journey was the *Times*, Jan. 7th, 1886) that in consequence of the determination of the Company to issue the 600,000,000 francs in lottery bonds, M. Adolphe, Governor of the Crédit Foncier, suggested that the Panama Canal works should be inspected by an independent engineer. The Government chose M. Rousseau for the purpose, and that eminent engineer was to limit his report to the practicability of the work in hand, and as to whether the canal could be made or not. His report, sent from New Orleans on his return home with M. Jacquet, is adverse to the scheme (*Times*, March 1st). Representatives from several other countries were, it was understood, invited to accompany M. Ferdinand de Lesseps, the Canal Company, to defray all expenses. M. de Lesseps left Southampton on January 28th, after being entertained at a banquet by the Mayor, and was received with much *éclat* at Panama. On his arrival at Panama (March 23rd) he declared that the works were making satisfactory progress, and that the canal would be completed in 1889. According to a report submitted to the Secretary of the United States Navy, the following comparative table of distances was given, to show the saving that would be realised in voyages through the canal from New York to the places named; the first table is the mileage *via* Cape Horn, and the second through the Panama Canal:—

Shanghai . . .	22,000	—	10,400	miles.
Valparaiso . . .	12,900	—	4,800	"
Callao . . .	13,500	—	3,500	"
Guayaquil . . .	14,300	—	2,800	"
Panama . . .	16,000	—	2,000	"
San Francisco . . .	19,000	—	5,000	"
Canton . . .	21,500	—	10,600	"
Calcutta . . .	23,000	—	13,400	"

For further details see "The Panama Canal," by J. C. Rodrigues, LL.B. (Sampson, Low & Co., London); *Athenæum*, Dec. 26th, 1885; "Encyclopædia Britannica" (ninth edition).

Ribble Navigation.—At the beginning of 1885 Mr. Walker of Westminster entered into a contract with the corporation of Preston to carry out their design of diverting the channel of the river Ribble, and constructing a 40-acre dock at Preston, for £456,000. The intention, of course, is to improve the town as a seaport, and great things are expected when the enterprise is completed. But this large sum does not by any means represent the cost of the whole work. The corporation, in their act of 1882, obtained borrowing powers amounting to £650,000, but it was stated at the beginning of 1886 that they were already committed to an expenditure of nearly £700,000. It was then estimated that under the first contract about 1,000 men were at work with spade and shovel; but that the dredging operations alone, which the corporation themselves had in hand, would take a period of five years to complete.

Severn Tunnel.—The Act for the construction of this great engineering work on the Great Western Railway, whereby the bed of the Severn was to be tunnelled to connect the railway on each side, was passed in 1872. By October 1879, seven years afterwards, the Company, who had sunk five shafts and bored three miles to find out the nature of the ground, were within 130 yards of making their headings meet under the river, when a land spring on the Welsh side was tapped and flooded the

workings. Mr. Walker of Westminster then contracted to finish the task, and about the end of 1880 the water was pumped out. The enterprise proceeded till October 1883, when the same land spring broke out at a lower level, and poured into the tunnel a torrent of 27,000 gallons per minute; but the flood did not reach beyond a certain height in the tunnel, which slopes up both ways from the middle. This difficulty was soon overcome, and heavy brick-work stoppings put in to prevent any other outburst. The tunnel is 7,664 yards long; the entrance on the English side is a cutting 1½ mile long and as much as 60 feet deep at the lower end; and the approach from the Welsh side is about a mile long and a similar depth. It was necessary to make large sea banks to keep out the high tides, as the approaches lie through marsh-lands. The tunnel is lined with brickwork from 2 ft. 3 in. to 3 ft. thick, imbedded in mortar of Portland cement. Sir John Hawkshaw was the engineer in-chief, and the first coal train from South Wales was timed to run through in January 1886. This was successfully done on the 9th of that month, a train consisting of fourteen trucks, two vans, and one engine, and carrying 150 tons of steam coal, leaving Aberdare at 9.50 a.m. and arriving at Southampton in about eleven hours. The passage through the tunnel occupied about nineteen minutes.

Simplon Railway Tunnel.—A scheme for continuing the railway from Geneva to Martigni and Brieg through the Simplon mountain to Domo d'Ossola, and thence to the Lago Maggiore. The estimated length is 12½ miles, and the cost about 100,000,000 francs. Encouraged by the successes in the Arlberg, St. Gothard, and Mont Cenis, it was stated at the commencement of 1886 that work would soon be commenced. The level to be followed, it is stated, will be lower than that of any of the others, hence the greater length. The St. Gothard, it may be remarked, is 1,154 metres, the Mont Cenis 1,338, and the Arlberg 1,313 metres, above sea level. The lighting and ventilating arrangements which have proved so successful in the St. Gothard will be closely followed.

Spey (River) Diversion.—This is said to be the most rapid river in Great Britain; and in connection with a new railway line along the coast of Banff and Elgin the Great North of Scotland Railway Co. found it necessary to build a bridge across it about two miles from the mouth. The central span is larger than that of any bridge in the kingdom, except those at the Forth Bridge (*q.v.*) in course of construction. The work involved the extremely difficult task of diverting the course of the river to obtain the proper conditions. A new bed was opened to the left of the course of the old one, and the latter was blocked with a huge dyke of sandbags. But these were rapidly swept away, and as the stream narrowed it is said to have cut for itself a depth of ten feet where only four feet depth existed before. The sandbags were chained together in twenties; and in spite of the heavy flood-water, consequent on the weather, the river course was successfully diverted under the new bridge on January 26th, 1886. M. de Lesseps, who had taken much interest in the affair, telegraphed his congratulations.

Straits of Northumberland (Canada) Tunnel.—A plan to pierce under the sea from Cape Tormentine to Cape Traverse, in order to run

a line of railway from Prince Edward's Island to the mainland, notice of which, it was stated, was lodged in the Canadian parliament near the end of 1885. No engineering difficulties are feared, and at present traffic is said to be only possible, for five months in the year, by means of ice boats.

Suez Canal.—The deepening and widening of this valuable waterway, or rather the construction of a parallel waterway, was decided upon in July 1883, after considerable commotion had been caused by an agitation amongst the English shipowners, who find three-quarters of the traffic, in favour of a development of some kind. Mr. Childers, then Chancellor of the Exchequer, gave details of the agreement entered into by Her Majesty's Government with **M. de Lesseps** in the House of Commons on July 11th, 1883, whereby the former were to find £8,000,000 capital, at 3½ per cent., and to use their good offices with the Egyptian Government. Nothing, however, has been done; and as the matter now stands, the Egyptian Government has placed an obstacle in the way by refusing its consent to a modification in the Canal Company's financial management, by which the interest of the loan could be paid out of capital whilst the new works proceeded. Further, they have pointed out that to increase the width of the canal to 66 metres would be a deviation from the concession to which they could not agree.

Tay Bridge.—The great bridge which spanned the Tay fell on December 28th, 1879; but soon afterwards the work of rebuilding was commenced. The new bridge will be about two miles long, and contain 85 piers, the site being only 60 feet further up the river than that of the old erection. Four piers on the south end are within tidal range, the next 23 continue the structure to the south side of the navigable channel, which is spanned by 14 great piers. From the north end of the navigable channel to the Dundee side of the river, 36 piers will be erected. Seven piers on land connect the bridge railway with the North British system running into Dundee. The following was the state of the works as reported upon at the end of 1885: Of the 27 piers to the south of the navigable channel only four remain to be sunk; of the 14 great piers only four remain to be sunk; while all the northern piers, 43 or 44 in number, have been founded. The trains are to run on the lower portion of the big spans, and the upper boom of the others; the bridge will be built with double lines on a steel floor. The height above high-water mark averages about 77 ft. clear under four of the spans in the navigable channel, that of the remaining great spans being 75 to 58 ft. on the north side, gradually growing less; and for some distance on the south side the height is from 63 ft. to 65 ft. The piers are built of cylinders to low-water level, filled with concrete after being imbedded in the river bottom; then follows brickwork and a superstructure of malleable iron, the shafts being connected by various stays and arches, "the whole superstructure being thus brought into one immediately underneath the girders." **Messrs. W. Arrol & Co.**, Glasgow, are the contractors, and the work is expected to be completed at Midsummer 1887.

Tehuantepec Ship Railway.—This scheme for crossing the isthmus between North and South America, by constructing a novel line in Mexican territory with appliances for convey-

ing ships bodily from the Atlantic to the Pacific Oceans, has not yet been brought down to a commencement. **Mr. (or Captain) Eads** suggested the project in the first instance, and in contradistinction to the Panama Canal (*q.v.*), the idea met with, and still retains, considerable favour in the United States. The subject was dealt with in a lengthy paper read before the American Association for the Advancement of Science, in August 1885, by **Mr. E. L. Corbath**, who is associated with **Mr. Eads**; and it is added that a number of leading men have recognised its possibilities. The message to Congress of President Cleveland in December of the same year contained the sentence, "The obvious advantages of the Tehuantepec Ship Railway, if feasible, deserve consideration." But, as the matter is still pending, further description is at present unnecessary.

Tilbury Deep-Water Docks.—It is calculated that these new docks on the Essex shore of the Thames will, when completed, accommodate any vessel afloat—including the *Great Eastern* if the caissons dividing the graving docks were removed. The main dock is 1,600 feet long and 600 feet wide, with three branches, each 1,600 feet long, one 300 feet wide and the others 250 feet. The depth is 38 feet from Trinity high-water mark. Then there is a lock closed by three iron gates, virtually making two locks, one 555 feet and the other 165 feet; depth 38 feet and width 100 feet. Near this lock there are two large graving docks, and then the great tidal basin at the entrance, with an area of 19½ acres, depth 46 feet below Trinity high-water mark, and never a depth less than 26 feet. Towards the end of last year (1885) the works were sufficiently advanced to allow of the water being admitted.

England and Wales, Criminal Statistics of. See CRIMINAL RETURNS (APPENDIX).

English Church Union, The, was formed in 1860 for the purpose of uniting clergy and laity "in defence of the doctrine and discipline of the Church of England, and of the rights and liberties of her faithful children." Viscount Halifax (formerly the Hon. C. L. Wood) is the president, and the vice-presidents include the Archdeacon of Taunton (better known as Archdeacon Denison), the Rev. Canon Carter, the Earl of Limerick, and the Earl of Glasgow. Amongst the members of the council are the Bishop of Aberdeen, the Dean of Exeter, Canon Scott Holland and Canon Malcolm MacColl, the lay members including Lord Edward Churchill and Sir Walter Phillimore. Those only who are communicants of the Church of England, or of churches in communion with her, can be elected and enrolled. The terms of subscription are: for members, 10s. per annum, and for associate-members and women-associates *as. 6d.* The Union comprises fourteen bishops, 2,600 other clergy, and 17,000 laity. Its object is to defend and maintain unimpaired the doctrine of the Church of England against Erastianism, Rationalism, and Puritanism. Of late years the legal business of the Union has materially decreased, owing to the "policy of peace" inaugurated by the late Archbishop of Canterbury, and supported by the late Bishop of London. Another reason for this decline in defensive litigation is that the Union has refused to recognise the jurisdiction of Lord Penzance in matters ecclesiastical, and members who have been prosecuted since the passing of the Public Worship Regulation Act have

neither appeared in person nor been represented by counsel, but have allowed judgment to go against them by default. In 1877 a sustentation fund was created to supply the loss of income incurred by those who had been proceeded against; and amongst those to whom grants have been made are the Revs. J. P. Dale, R. W. Enraght, S. F. Green, A. H. Mackonochie, Arthur Tooth, etc. The president and council emphatically repudiate any political bias or party character in the organisation; and the names of Sir Walter Phillimore, a Liberal candidate for St. George's (Hanover Square) division at the recent election, and Canon Malcolm MacColl and others, strengthen the declarations. At the same time the Union offers a vigorous opposition to the Deceased Wife's Sister Bill, and in its last annual report announced its intention to resist to the uttermost any attempt to deprive the Church of England of her endowments and consecrated buildings. Evening communions are not approved of by the English Church Union, but the use of vestments is encouraged. The total number joining the Union during the year ending in June last was 832, of whom 92 were clergymen and 740 lay communicants. The organ of the Society is the *Church Union Gazette*; offices 35, Wellington Street, Strand; secretary, Lieut-Col. J. B. Hardy.

English Land Restoration League. Some friends who frequently met in the early part of 1883, for the study of Mr. Henry George's "*Progress and Poverty*," determined in April 1883 to form a society with the object of agitating for the restoration of the land to the people. From the first the **Land Reform Union**, as it was called, met with considerable success. A number of large and successful meetings were held, among which one of the most remarkable was that at St. James's Hall on Oct. 30th, Mr. Michael Davitt (*q.v.*) being the principal spokesman. Mr. Henry George (*q.v.*) visited England, on the invitation of the Union, and lectured at Bolton, Cardiff, Dundee, Edinburgh, Glasgow, Hull, Leeds, Liverpool, Newcastle, Oxford, etc., and in London; the result being an immense increase in the numbers and influence of the Society. At its first annual meeting, in May 1884, the name of "**English Land Restoration League**" was adopted. The League has since been engaged in a most vigorous and successful propaganda, more than trebling its number of members during the year 1884-5. Several branches, and independent societies working for the same object, have been formed; and (March 1886), some twenty Radical clubs and societies, with a membership of nearly 10,000, are affiliated to it. At the general election of November 1885, the Hon. Treasurer of the League, Mr. William Saunders, obtained a seat in parliament, as member for the Eastern Division of Hull; and another member of its executive, Mr. J. C. Durant, who has been identified with the Society from the very first, was elected M.P. for Stepney. A considerable number of other members are stated to be in sympathy with the League. Offices, 8, Duke Street, Adelphi, W.C.

Engraving, Automatic, is a term applied to all methods of reproducing pictures without the intervention of an engraver. The earliest form of automatic engraving was **etching**, which, properly speaking, does not mean biting a picture by means of acid on to a plate, but

scratching or drawing, and then fixing, the picture on the plate which is to be bitten. A clever mechanic can manage the biting process: it needs an artist to etch the picture. The chemical and photographic methods of automatic and mechanical engraving are in the trade described as "the process," or "**process work**." These processes are (1) **chemical**, or (2) **photographic**. Of all chemical processes **zincography** is the best known in England, and it gets its name from the zinc plates which are used for printing the designs. It was invented by M. Gillot of Paris, in 1850, when it was called "**Gravure Panico-graphique**." Subsequently he called it "**Gillotage**," and those who worked it "**Gilloteurs**." At the Exhibition of 1855 M. Gillot received for his discovery the reward of an "Honourable Mention." In zincography the zinc plate is about one-eighth of an inch thick, and is either polished or grained. The picture is laid down on it with lithographic ink from "transfer paper." An acid-resisting ink or varnish is then fixed on the parts of the plate which are to be protected, and it is subjected to the first biting in a bath of dilute nitrous acid, which is kept rocking so as to prevent particles of nitrate of zinc being deposited on the edges of the bitten parts. After a quarter of an hour the lines must be still further protected. The plate is sponged, dried, and heated, till the ink runs and spreads over the lines. After cooling, powdered resin is dusted over the surface, and the biting continued in acid baths of ever-increasing strength, when finally the plate is dried, and the greasy ink removed by benzine. A finer process is that known as **Dawson's Typographic Etching**, in which acids are not used. A brass plate is prepared with a white opaque wax ground, somewhat as in the old form of etching. The picture is drawn on it with an etching point invented for the purpose by Mr. Alfred Dawson, and which is more like a graver than an etcher's needle. This cuts furrows in the ground, and when the drawing is made the lines show the surface of the plate, the wax which remains representing the future whites of the picture. The drawing is in fact in *intaglio*, but it is very cleverly converted into one in *relief* by treating it as a mould for a copper electrotpe block from which the picture can be printed. As it stands, the wax ground is of course too thin to give the necessary depth to the sunk parts of the mould, so a workman "builds up" the undisturbed wax representing the "whites," by adding to it a coating of semi-liquid wax by a peculiar implement resembling a writing pen. When the wax ground is so built up that the furrows are sufficiently deep, the plate becomes a mould, from which the electrotpe produces in the ordinary way a copper electrotpe block, from which the picture can be printed. The supreme advantage of this process lies in the fact that the impressions come straight from copper, which always gives a finer and cleaner quality of line than can be obtained from zinc, the bitten edges of which are apt to be slightly ragged. In **Bruce's White-line Etching process** the zinc plate is covered with a prepared ground. The *white* lines are scratched away, the ground being left on the parts which are to hold the ink in printing. Then the plate is bitten in an acid bath in the ordinary manner. **Photozincography** is a term applied to the process of transferring the drawing

enlarged or reduced to the zinc plate by photography. An ordinary negative on glass is taken of the picture. It is applied to a sensitised zinc plate, and by the action of light printed on it just as a *carte-de-visite* is on sensitised paper. The coating of the zinc plate to which the negative is applied is what the French operators call *bitumen de Judée*. Four parts of it are dissolved in one hundred of benzine. When by the action of light the picture is printed on the plate, a wash of turpentine dissolves off the bitumen from all the parts where it has not been rendered insoluble by the action of light. Sometimes, too, an acid-resisting varnish is fixed on the future "blacks" of the picture, and then the "whites" are bitten out in an acid bath from the unprotected surface of the plate. To develop "colour," or intensify the gradations of light and shade, **M. Gillot and Lofman** use specially prepared enamelled paper for the original drawing. The surface of this paper may be cut up into delicate parallel lines, or granulated in tiny dots. When a pencil is passed over it, the effect produced is that of a crayon or chalk drawing. A grey-tinted lined paper is also used. When a drawing is made on it the artist scrapes away the grey surface, and by exposing the white paper underneath, gets his high lights. **Mr. A. Hentschel's Direct Photographic Etching process** is a modification of the Parisian methods. He prints his negative on sensitised carbon paper. This is laid face down, and fixed on a polished zinc plate, which is put in a bath in which all the carbon paper, except that which holds the lines of the drawing, is washed away. The plate is then bitten in an acid bath. Photography has been invoked to enable the automatic engraver to preserve the half-tones of drawings in wash, sepia, or monochrome. **Mr. Walter Woodbury** suspends a fine gauze in the camera between the picture to be photographed and the sensitised plate, thus producing a series of delicate lines on the negative, expressing half-tones on the printing surface. The gauze is nearer to the plate than the picture; therefore the network produced is too coarse to yield good results. **Mr. Frederick Ives** of Philadelphia applies his negative to a gelatine plate sensitised with bichromate of potash. The plate is swollen in water, and a cast is taken in plaster of Paris—the highest parts representing blacks and the lowest whites. He then presses on the white ground an inked surface of V-shaped lines or stipple, till he gets his effect. **Mr. J. S. Hodson** thus describes the **Meisenbach process**: "A transparent plate is hatched or stippled in parallel lines. A transparent positive is made of the object. The two plates are joined, preferably face to face, and from the combined plates a definite negative is photographed in the ordinary way. In order to cross-hatch and break the lines of the shading, the hatched or stippled plate may be shifted once or twice during the production of the negative. The photographic negative thus obtained may be either applied direct to a zinc plate, or a lithographic transfer may first be made in the usual manner, and the plate subsequently bitten by acid to form a block in relief" (*Art Journal*, November 1885). The **Typographic Etching Company** have recently begun to work another process for yielding plates in *intaglio*. They cover a copper plate with a film of sensitised gelatine, on which they print the picture from a photographic negative. Having de-

sensitised the film in a water-bath, a mixture of camphor and resin dissolved in chloroform is washed over the surface. On applying heat to the plate the gelatine breaks into a delicate grain, and the resin is left in minute particles on the surface. In an acid bath the platelins bitten where the soluble portions of the gelatine have been removed. Those parts which have been rendered insoluble by photographic printing, of course carry the lines of the drawing, and resist the mordant. As to mordants, the rule is to use nitrous oxide for copper and nitric acid for zinc. The cost of process work varies from 1s. 6d. to 4d. per square inch, exclusive, of course, of the cost of the original designs. It is extensively used in the bookbinding trade, where the blocks for stamping book-covers are usually "process blocks." It is also extensively used for advertisement blocks. The process of **electrotyping** may here be fitly described. The block or type is prepared by filling up all the interstices with plaster of Paris, leaving only the face of the type free. Common bees-wax is melted down, and some poured into a leaden tray; when it has partly cooled, the object to be reproduced is pressed into the wax, by which means a perfect impression is obtained, which is henceforth called a mould. This mould, after some minor processes, is subsequently suspended in a solution bath, containing sheets of copper. The electric current is connected with the poles, and the work of precipitation commences. After a few hours, a thin film or shell of copper that has been precipitated by the galvanic action from the sheet of copper covers the mould. When the shell is of sufficient thickness, the mould is taken out of the solution, and by the application of a little hot water the shell is easily removed, the face of which is an exact facsimile of the original from which the mould was taken. Molten lead is then poured on to the back of the shell, to strengthen and thicken it, and after numerous other processes for cleaning and finishing, the plate or block is ready for the printer. **Electrotypes** from process blocks, are weaker than the originals, and yield poorer and paler impressions. Stereotypes from process blocks hardly ever print well; and it cannot be too strongly impressed on artists who draw for "process," that they must keep their work open, and produce their effects by the simplest possible means, and by as few lines as possible. The best results are usually obtained by reducing the original drawing one-third by photography before printing it on the zinc plate. Process work would be admirably adapted for newspaper illustrations, if it were possible to let the original blocks into the "stereo" forms automatically, and without delay, so that they might be printed from fast rotary machines like ordinary type. Some methods of doing this have been patented, but as yet none seem to have given complete satisfaction. The best, perhaps, is that of **Mr. Le Sage**, manager of the *Daily Telegraph*, **Mr. Shields**, and **Mr. Hayman**, late of Wolverhampton.

Enniskillen, William Willoughby Cole, 3rd Earl of (creat. 1789); Baron Grinstead (1815), by which title he holds his seat in the House of Lords; b. 1807, and succeeded his father 1840. M.P. for co. Fermanagh (1831-40).

Ensilage. Green crops preserved for future use by storage in receptacles called "silos," constructed above or below the ground, and made air and water-tight to prevent the process

of fermentation. The "silo," usually a pit of quadrangular form, four times deep as broad, is lined with wood, brick, concrete, or stone, the last two materials being the best. The fodder, cut into size about three-eighths of an inch, with all leaves and stalks thoroughly mixed, is gradually stored in the "silo," pressed down, and kept compressed by weights placed on the covering boards, provision being made for adequate drainage, and preserved from the weather by tarpaulin, or any suitable protective covering on the top. The forage, which keeps good for a considerable period, is withdrawn as required either from above or beneath, and is found to possess a slightly acid and vinous smell and taste, which renders it particularly grateful to cattle, the very slight fermentation it has undergone greatly aiding the primary processes of digestion. The importance of ensilage to agriculture may be inferred from the fact that a much larger number of animals can be kept on this food than on hay, cake, or roots—removing one great obstacle to raising stock at a profit by largely diminishing the high cost of fodder in winter, and thus equalising the average keep of the year. For dairy purposes ensilage is especially valuable, milch cows yielding in winter equally good butter, with increased quantities of milk, richer in colour, quality, and flavour. The farmer is also, by the employment of ensilage and "silos," rendered independent of the weather at all seasons of the year. Besides cattle, sheep, pigs, and poultry are advantageously fed on ensilage. The four cardinal virtues claimed for the process of ensilage appear to be (1) its safety in all seasons, its efficiency, and notably the avoidance of loss in the preservation of green crops; (2) the value of its products as food for animals, and its beneficial effects on the health of all stock to which it is given with discretion; (3) its utilisation of substances almost valueless, or otherwise waste; and (4) the elasticity the system affords for cropping the land, and in providing a succulent food available all the year round, by which an increased number of stock per acre can be maintained. The idea, in its modern form, originated in a work published in France, 1877, by M. Goffart, and was introduced into America by Mr. Mills, of Pompton, New Jersey, U.S., and into England by Mr. Thorold Rogers, M.P., whose work upon the subject was the first one published in England. It has now received the sanction of, and is largely adopted by, the leading agriculturists of Great Britain. Detailed experiments on ensilage have been conducted by the Royal Society of Agriculture, who award prizes for the best and most successful methods and results of preparing and storing ensilage. In June 1885 there were in Great Britain 1,183 silos in use—963 in England, 59 in Wales, 161 in Scotland—giving a total capacity of 3,313,006 cubic feet, with an average capacity of 2,801 cubic feet to each silo. The largest silo returned in 1885 is in the county of Derby, its dimensions being 84 ft. long, 60 ft. wide, and 11 ft. deep, having a total capacity of 55,460 cubic feet.

Entails. See LAND QUESTION, THE.

Envoyés and Plenipotentiaries. See AMBASSADORS.

Eocene. See GEOLOGY.

Exotic. See GEOLOGY.

Epsom Grand Prize and Meetings. See RACING.

Erckmann-Chatrian, Messrs. The joint name of two French-Alsatian authors and collaborators. Emile Erckmann, b. May 20th, 1822, at Pfalzburg, studied law at Paris; and Alexandre Chatrian, b. at Soldatenthal, Department of the Meurthe, Dec. 18th, 1820, was for some time a teacher in a school in his native town. Becoming intimately acquainted in 1859, they conjointly produced the numerous works with which their names have respectively been identified. The majority of their writings have been translated into English.

Erne, John Henry Crichton, 4th Earl of (creat. 1789); Baron Fermanagh (1876), by which title he holds his seat in the House of Lords; b. 1839, and succeeded his father 1885. Was M.P. for Enniskillen (1868-80), and for co. Fermanagh (April 1880 till his accession to the peerage); a Lord of the Treasury (1876-80).

Errington Mission, The. Called after Mr. (now Sir) George Errington, formerly M.P. for County Longford. During the disturbances in Ireland in 1881, Mr. Errington was in Rome, and the Gladstone Ministry were charged with having sent him there as an emissary of the British Government, to ask the Pope to put pressure on the Roman Catholic priesthood in Ireland, to discourage the Land League agitation. The matter was frequently debated in parliament; and while it was denied that Mr. Errington had any official authority, it was stated that he had been recommended by Lord Granville as a well-informed and influential Roman Catholic gentleman, who could give a trustworthy account of the state of affairs in Ireland. A circular from Cardinal Simeoni, condemning the Parnell testimonial, was attributed to the influence of Mr. Errington; and at a subsequent period he was charged with attempting to prevent the appointment of Dr. Walsh to the Archbishopric of Dublin. He was created a baronet by the Gladstone ministry shortly before they left office, and did not seek re-election.

Errol, William Harry Hay, 18th Earl of (creat. 1452); Baron Kilmarnock (1831), by which title he holds his seat in the House of Lords; b. 1823; succeeded his father 1846. Is hereditary Lord High Constable of Scotland, the highest hereditary distinction in the United Kingdom after those enjoyed by the Royal Family.

Erskine, William Macnaghten Erskine, 5th Baron (creat. 1806); b. 1841; succeeded his father 1882. The first peer adopted the profession of the law, and eventually became Lord High Chancellor of England.

Erzeroum. An important Turkish strategical centre in Armenia, which, since the annexation of Kars by Russia (1878), has become the principal frontier fortress and point of resistance to a Russian advance from the Caucasus to Constantinople. It is about ninety miles from Trebizond, upon the Black Sea, from which it can readily receive support; but it is doubtful whether the Turks, unless assisted by a European ally, would be able to repeat at Erzeroum the memorable defence of Kars, the Russians since 1878 having spent millions in developing the railways and military roads of the Caucasus, carrying the latter up to the Turkish frontier, and having also enormously increased the offensive and defensive resources of Kars, while the Turks have done scarcely anything to put Armenia in a condition of defence. The population is variously

estimated at from 30,000 to 50,000, and as the administrative capital of a Turkish vilayet, covering 27,000 square miles, with population 675,000, it attracts a fair amount of trade. The Armenian element is large, and since 1878 the Russianised Armenians at Tiflis have been desirous for its incorporation with Russia, which seems likely to be its ultimate destination.

Esher, William Balliol Brett, 1st Baron (creat. 1885); b. 1815. Educated at Westminster, and at Caius Coll., Camb. (B.A., senior opt., 1836, M.A. 1840). Called to the bar at Lincoln's Inn (1846), made Q.C. (1860); was Solicitor-General (1868), a justice of the Common Pleas (1868-75), a judge of the High Court of Justice, Common Pleas Div. (1875-6), and a Lord Justice of Appeal (1876-83), since when he has been Master of the Rolls. Was M.P. for Helston (1866-68).

Esmonde, Sir Thomas Henry Grattan, Bart., M.P., was b. 1862. Lieutenant in the 6th Brigade South Irish Div. Royal Artillery. Returned as a Nationalist for South Dublin County (1885).

Espartero, Marshal. See SPAIN.
Esparto Grass. Esparto or Spanish grass—*Macrochloa* (L. *Stipa*) *tenacissima Kunth*—is a plant of the tribe *Stipeæ*, and resembles the well-known feather grass. It is indigenous to Spain and the north of Africa, and abounds near the sea-coast. It attains a height of from three to four feet; the leaves vary from six inches to three feet in length. Esparto grass, by reason of its great flexibility and tenacity of fibre, has for centuries been employed in the making of baskets and mats. Of late years it has been largely devoted to the manufacture of paper—as a substitute for linen rags. It was first utilised for this purpose by the French, and was introduced into Great Britain in 1857. Esparto grass is now imported in large quantities, which are yearly increasing.

Essex, Arthur Algernon Capell, 6th Earl of (creat. 1661); b. 1803; succeeded his uncle 1839. The 1st Earl of Essex was Viceroy of Ireland, and subsequently First Lord of the Treasury.

Esslemont, Mr. Peter, M.P., was b. 1834. Connected with the firm of Esslemont and Macintosh, Aberdeen. Entered Aberdeen Town Council (1869); Lord Provost (1880). Returned in the Liberal interest as member for East Aberdeenshire (1885).

Established Church, The. This name of *Established* is misleading. The Church, which from its relation to the State is called National, and from its doctrines (*vide* the Creeds), Catholic and Apostolic, recognises no establishment by law. It is in no sense a creation of parliament, having existed long before parliament. It is established simply by its antiquity, and as being the accepted Church of the nation.—Its **History and Constitution**. It claims an apostolic foundation, asserting for its bishops an unbroken line of descent, in the laying-on of hands, from the Apostles themselves. Tertullian speaks of Christianity being widely disseminated in England as early as A.D. 202; and that the Church was from the first under episcopal supervision we find by the fact of three English bishops being present at the great Council of Arles in A.D. 314. Moreover, as the Roman missionaries under Augustine did not come over until A.D. 596, the English Church has always maintained its independent origin. Its **Government** is

by its three Orders of Bishops, Priests, and Deacons. Its **Doctrine** is contained in its Thirty-nine Articles of Religion, its **Form of Worship** being set forth in the Book of Common Prayer. Its **Clergy** number, in round figures, a total of about 23,000, divided as follows:—Archbishops, 2; Bishops, 33; Suffragan-Bishops, 4; Deans, 30; Archdeacons, 85; Residential Canons, 131; Rural Deans, 613; Beneficed Clergy, 13,600; Unbeneficed, 9,000.—**Progress**. No. of Dioceses in 1876, 28; in 1885, 33, with three more Sees (Bristol, Wakefield, and Coventry), in course of endowment. The five new bishoprics are Truro, St. Albans, Liverpool, Newcastle, and Southwell. No. of Benefices in 1831, 10,718; in 1885, 13,600. No. of Parsonages in 1831, 5,947; in 1885, 11,000. No. of Clergy in 1801, 10,307; in 1841, 14,613; in 1885, 23,000. **Money raised for Church Building** alone, from 1840 to 1885 (purely by voluntary subscriptions, with the exception of one State grant of £1,500,000—*vide* Lord Hampton's Parliamentary Report 1874)—£45,000,000; for Endowments £3,771,000. **Amount annually raised**, by purely voluntary means: for Church Building and Restoration, £1,000,000; for Foreign Missions £500,000; for Elementary Education, £500,000; for Home Missions, Temperance Work, Clubs and Charities, at least another £500,000. The **Revenues** of the Church, from endowments, tithes, land, etc., amount to between four and six millions sterling. The exact amount is not known. The **Church population** also is not accurately known, but the Church claims over 60 per cent. of the entire population. The Church accommodation is represented by about 6,200,000 sittings. Spiritual supervision is provided for the whole country, which is divided first into **Provinces** (Canterbury and York) presided over by the Archbishops; which are subdivided into **Dioceses**, presided over by Bishops; these again being broken up into **Parishes**, which are in the charge of the minor clergy. The **Educational work** of the Church is represented by (in round figures) 11,600 efficient schools, under Government inspection, affording accommodation for 2,351,235 children, being more than half the school accommodation of the country. These schools have been built at a cost to the Church of not less than £12,500,000. There are also, in connection with the Church of England, thirty training colleges for school teachers, erected at a cost of £195,000, towards the maintenance of which the Mother Church annually contributes £10,000.—**Parties**. The three great party divisions in the Church of England may be said to be representative of the various types of mind which will be found in any large society. The "**High Church**" or historical party are those who attach great importance to the historical position of the Church in the succession of her Ministers; who uphold her authority in matters of doctrine and discipline; and value her rites and ceremonies, and especially her sacraments, not only as devotional aids and convenient symbols, but as divinely ordained means of grace, of which she is the authorised administratrix through a rightfully ordained clergy. The "**Low Church**" or Puritan party think comparatively little of these things, but set the greatest value on conversion, justification by faith, without the works of the law. They consider themselves rather as members of the Church invisible than of the Church visible, and have a dislike to ceremonies, or a suspicion of them,

as distracting the soul from true worship, unduly exalting the priestly office, or tending to false (chiefly Popish) doctrine. The "**Broad Church**," on the other hand, pay but little attention to either ceremony or dogma. They are for extending the liberty of belief within the Church beyond the bounds of the Apostle's Creed—as some assert even to the borders of Unitarianism itself, if not beyond them. They attach great importance to the social Christian virtues, to living a wholesome and cleanly life, adopting the precepts rather than the theology of religion. The three have been said to show forth respectively the body, the spirit, and the soul, of the Church. A society, "**The Church Defence Institution**," has been formed to counteract the agitation for disestablishment by means of lectures, publications, etc. Its income for the year ending 1885 exceeded £15,000. Offices, 9, Bridge Street, Westminster. (For list of Cathedrals, Archbishops, Bishops, and the dates of their appointment, see **CATHEDRALS**; and consult the "Official Year-book of the Church of England," 1886.)

Etching. See ENGRAVING, AUTOMATIC.

Ether. See HEAT.

Eton and Harrow Cricket. See CRICKET MATCHES.

"Etonensis." See NOMS DE PLUME.

Ettrick, Baron. See NAPIER.

"Eugene Aram." See IRVING, HENRY.

Evans, Captain Sir Frederick J. O., R.N., K.C.B., F.R.S., late Hydrographer of the Admiralty, d. Dec. 20th, 1885, in his 71st year. He entered the navy in 1828. In 1841 he was appointed senior surveying officer to the expedition under Captain Blackwood, in the dangerous service of exploring the Coral Sea, the Barrier Reefs of Australia, and Torres Straits. In 1847 he joined the *Acheron*, and was engaged for four years in the survey of New Zealand. In 1865 he was appointed chief assistant to the Hydrographer, retaining also his position as head of the magnetic department, and in 1874 Hydrographer. He was elected a Fellow of the Royal Society in 1862, and was more than once a vice-president. He was made a K.C.B. in 1881.

Evelyn, Mr. William John, M.P., F.R.G.S., of Wotton House, Dorking, was b. 1822. Educated at Oxford. He is J.P. for Surrey, and has served the office of High Sheriff. Returned in the Conservative interest as member for West Surrey (1849-57); Deptford (1885).

"Evening News." A daily paper (*4d.*), founded July 1881, of Conservative principles. It gives the latest political, general, and commercial intelligence of the hour. Editor, Captain J. Harris.

"Evening Standard." See "STANDARD."

Everett, Mr. Robert Lacey, M.P., yeoman farmer, of Rushmere, Ipswich, was b. 1833. Educated at a private school, Ipswich. Returned in the Liberal interest as member for South-East Suffolk (1885).

"Everitt, Graham." See NOMS DE PLUME.

Eversley, Charles Shaw-Lefevre, P.C., 1st Visct. (creat. 1857); b. 1794. Is High Steward of Winchester; in 1839 was chosen Speaker of the House of Commons, and on that occasion was sworn in a Privy Councillor; was re-elected Speaker in 1841, 1847, and 1852; was M.P. for Downton (1830), and for Hants (1831-57).

Evolution. A scientific doctrine that has a wide and also a more restricted significance. In the limited sense the name is applied to the

generalisation that all animals and plants have been evolved or developed from pre-existing forms. In this sense, Evolution is opposed to the doctrine of **special creation**, according to which every species of plant and every species of animal came into existence as the result of a special act of creation. In this connection Evolution is often inaccurately spoken of as the Darwinian theory (see DARWIN). For a full account of Evolution as concerning living things, see "**ORIGIN OF SPECIES**." In the second, **wider significance**, Evolution means the **continuity of all phenomena**: of physics, astronomy, chemistry, geology, as well as those of biology, which are to the Evolutionist one continuous and natural whole, following certain purely natural laws. As Evolution, in the special sense, is opposed to the idea of special creation of forms of living things, so, in the general sense, it is opposed to the idea of interposition from without in the whole series of the phenomena of nature, whether these concern bodies living or non-living.

Ewart, Mr. William, M.P., was b. 1817. Educated at the Belfast Academy. Representative of the Linen Trade in the North of Ireland in the negotiation for the French Treaty (1864). J.P. for counties of Antrim and Down, and the borough of Belfast. President of the Irish Linen Trade and Flax Supply Association; Mayor of Belfast (1859-60). Returned as Conservative member for Belfast (1878-85); re-elected for North Belfast 1885.

Ewing, Sir A. Orr, Bart., M.P., was b. 1810. Educated at Glasgow Univ. He is Deputy Lieutenant for Stirlingshire and a J.P. for the counties of Lanark, Dumbarton, Stirling, and Inverness. Has represented Dumbartonshire in the Conservative interest uninterruptedly since 1868. Received the honour of knighthood (1886).

Exchange Agency. See NEWS AGENCIES.

Exchequer and Audit Department. See CIVIL SERVICE.

Excise. See REVENUE, THE.

Executor. It is the custom in making a will in personal estate to name an executor or executors. Immediately upon the testator's death the executor becomes entitled to all the testator's personal property. He is bound first of all to bury the deceased and prove his will, then to pay out of it any debts due by the testator; and then to distribute the property, so far as it will go, in accordance with the will. Should there be more than one executor, each can exercise all the powers of the office, except that all must join in bringing any action respecting the estate. The office continues to the survivors or survivor. Should the executor renounce, or die, before taking out probate, or not appear when cited to take probate, his rights of executorship cease entirely. But when the last surviving executor dies, then his executors are also executors of the original testator. If the executor is an infant, the Probate, Divorce, and Admiralty Division of the High Court will grant administration to his guardian or some other person who becomes administrator *duringe minore ætate* (during the minority). An executor merely in virtue of his appointment is released from any debts due from him to the testator, and may retain out of the assets any debt due from the testator to him in priority to all other debts of the same degree; but this provision is so guarded in equity as to be practically of no effect. Any person who takes

upon himself to be executor without having been appointed, is said to be an executor *de son tort* ('of his own wrong'), and is not allowed to derive any benefit from the office. Should no executor be available, the Court will grant letters of administration *cum testamento annexo* (with the will annexed), as distinct from the ordinary letters of administration granted when a person dies without making a will.

Exeter, Right Rev. Edward Henry Bickersteth, D.D., 63rd Bishop of (founded 1046); b. 1825; educated at Trin. Coll., Cambridge, where he graduated (1847), D.D. (1885). Deacon (1848), priest (1849); vicar of Hinton Martell, Dorsetshire; vicar of Christ Church, Hampstead (1855-85), when he was appointed Dean of Gloucester, and shortly afterwards Bishop of this see; consecrated 1885.

Exeter, William Alleyne Cecil, P.C., 3rd Marq. of (cr. 1801); b. 1825; succeeded his father 1867; was Treasurer of the Queen's Household (July 1866 to March 1867). Was M.P. for Lincolnshire (1847-57), and for the Northern division of Northamptonshire from the last date until his succession to the marquessate. Is hereditary Grand Almoner. The first Lord Burchley was the celebrated statesman *temp.* Elizabeth.

Exmouth, Edward Fleetwood John Pellew, 4th Visct. (creat. 1816); b. 1861; succeeded his uncle 1876. The 1st peer was the celebrated Admiral Pellew, G.C.B., who bombarded Algiers (1816).

Ex-parte. A term explained by Mr. C. Sweet in his "Law Dictionary" as follows:—"In its primary sense 'ex-parte' as applied to an application in a judicial proceeding, means that it is made by a person who is not a party to the proceeding, but has an interest in the matter which entitles him to make the application. In its more usual sense 'ex-parte' means that an application is made by one party to a proceeding in the absence of the other."

"Expertus." See NOMS DE PLUME.

Explosive Substances Act, 1883. Passed in order to check the use of explosives as a means of political intimidation, this Act provides that (a) any person maliciously causing an explosion likely to destroy life or to cause serious injury to property, shall be liable to a maximum penalty of penal servitude for life; (b) any person doing any act with intent to cause such explosion, or making or keeping any explosive with like intent, shall be liable to a maximum penalty of penal servitude for twenty years; (c) any person making or keeping an explosive under suspicious circumstances, and not able to show that his object in so doing was lawful, shall be liable to a maximum penalty of fourteen years' penal servitude; (d) any person charged under the above provisions, and the husband or wife of such person, may at such person's request be examined as a witness; (e) accessories to crimes under the Act may be punished as principals; (f) when the Attorney-General has reason to believe that a crime under the Act has been committed he may order an inquiry, and thereupon any justice for the place may examine on oath any witness who appears, and bind him to appear when called upon, although no person has been charged before the justice; (g) upon information on oath that the person so bound is likely to abscond, the justice may issue a warrant for his arrest, and commit him to prison during the time of his recognisances; (h) if any person is

charged before a justice under the Act, no further proceeding shall be taken without the consent of the Attorney-General; (i) certain powers are to be given for the search for and seizure of explosives.

"Expositor, The," was founded 1875, under the editorial care of **Rev. Samuel Cox, D.D.** The first and second series, consisting of twenty volumes, were completed 1884. The third series, under the editorship of **Rev. W. E. Nicholl, M.A.**, was commenced 1885. The *Expositor* is intended to give the results of the best scholarship of the day, derived from the clergy and theologians of all denominations, in addition to Bible studies and exegesis.

Ex post facto. This epithet is explained by Mozley and Whiteley in their "Concise Law Dictionary" to signify something done so as to affect another thing that was done before. Thus an ex-post-facto law is a law inflicting a penalty upon an act committed before the law had been passed.

"Ex-ship." See REVENUE, THE.

Extradition Acts, 1870, 1873. The Act of 1870 is the principal Act. It provides that when an arrangement has been made with any foreign state with respect to the surrender of fugitive criminals, Her Majesty may by Order in Council direct that the Act shall apply in the case of that state. A fugitive is not to be surrendered if his surrender is demanded in respect of a political offence, or if he can make it appear that the demand has been made with a view to try him for such an offence. Nor is he to be surrendered except on condition of not being tried for any offence other than the one in respect of which his surrender is demanded. A requisition for surrender is to be made to the Secretary of State by some diplomatic representative of the country requiring the criminal. The Secretary of State may thereupon issue an order to a police magistrate, requiring him to issue his warrant for the apprehension of the fugitive. Such evidence as would justify the magistrate in issuing his warrant if the crime had been committed in England is necessary, and will justify his issuing it in the case of a fugitive without any order; but he must then report his action to the Secretary of State, who may order the warrant to be cancelled. When the fugitive has been brought before the police magistrate, the case is to be heard in the same way as if the prisoner were charged with an indictable offence committed in England. Upon evidence such as in that case would justify committal, the magistrate shall commit the fugitive to a prison in Middlesex, informing him that he will not be surrendered for fifteen days after his committal, and may apply for his *habeas corpus*. At the expiration of the fifteen days the Secretary of State may order the fugitive, if not delivered by the court, to be surrendered to a person authorised for that purpose by the pursuing state, who must convey him out of the United Kingdom within two months. An Order in Council made under this Act remains in force so long as the arrangement between the United Kingdom and a foreign state, which it must embody, remains in force. Such arrangements are usually made terminable at one year's notice. They have been concluded with almost all civilised countries. The Act of 1873 is almost altogether explanatory.

Extreme Left. See FRENCH POLITICAL PARTIES.

F

Factory and Workshop Act, 1878. This Act consolidates a series of statutes for the regulation of factories and workshops extending from the commencement of the century down to the present time. It contains practically all the law dealing with this subject, and extends to a hundred and seven sections. The first part contains the general provisions for drainage, ventilation, and fencing of dangerous machinery, vats, &c., as well as the rules regulating the hours of labour for women, young persons and children. In textile factories the hours of labour for women and young persons are not to exceed ten, and Saturday is to be a half-holiday. The hours of labour for children are fixed at half of those allowed to women or young persons. These rules are modified in their application to other factories and workshops. Provision is made for holidays; for insuring the attendance at school of children employed in factories or workshops; for certificates of fitness for employment to be obtained by children and young persons; for giving notice of accidents to inspectors and certifying surgeons appointed under the Act. The second part contains special provisions relating to particular classes of factories and workshops—*e.g.*, to insure lime-washing, &c.; restriction upon the employment of women, young persons or children in special industries, and exceptions relaxing the law in favour of certain industries, &c. The third part regulates the appointment and functions of inspectors and certifying surgeons, fixes penalties and provides for their recovery before a court of summary jurisdiction. The fourth part contains miscellaneous provisions, and defines a "child" as any person under fourteen years of age, and "young person" as any person between the ages of fourteen and eighteen years.

Faculties, Court of. A court of the Archbishop of Canterbury, presided over by the Master of the Faculties. To him must be made all applications for admitting notaries to or removing them from their office. The judge of the Provincial Courts of Canterbury and York is *ex officio* Master of the Faculties. (See Phillimore, "Ecclesiastical Law.")

Fahrenheit. (From Gabriel Daniel Fahrenheit, b. at Danzig 1686, d. 1736.) The name of one of the three scales used in thermometers. The level at which the mercury or other fluid stands when the thermometer is completely immersed in melting ice is called the freezing-point of water, and is on the Fahrenheit scale marked 32° . The level at which the fluid stands when the thermometer is completely immersed in the steam of boiling water is called the boiling-point of water, and is on the Fahrenheit scale marked 212° . The space between the freezing and the boiling points is divided into 180 ($212 - 32$) equal parts, each of which is called a degree. The only record of Fahrenheit himself is in the form of five papers in the "Philosophical Transactions" for the year 1724. These deal with the boiling-points of certain liquids, the freezing of water, certain specific gravities, an areometer, and a new kind, not of thermometer, but of barometer. Fahrenheit's reasons for using the numbers 32 and 212 respectively for the freezing and

boiling points of water was that 180 was a number breaking up easily into aliquot parts, and that the lowest temperature attained by him, by mixing ice water and sal ammoniac, corresponded with 32 of such 180 degrees below the freezing-point of water. To express the number of degrees of temperature registered on the Fahrenheit scale in terms of the Centigrade, subtract 32, multiply by 5 and divide by 9. Thus 212° F. are equivalent to $212 - 32 = 180 \times 5 \div 9 = 100^{\circ}$ C. To turn Fahrenheit to Réaumur subtract 32, multiply by 4, and divide by 9. Thus 212° F. are equivalent to $212 - 32 = 180 \times 4 \div 9 = 80^{\circ}$ R.

Fairbairn, Sir Andrew, M.P., son of Sir Peter Fairbairn, of Wordsley, Yorkshire, was b. 1828. Educated at Geneva, and St. Peter's Coll., Cambridge. Called to the bar at the Inner Temple (1853). He is head of the firm of Fairbairn, Naylor, & Macpherson, machine makers, Leeds, of which town he has been twice Mayor. Knighted (1868). Formerly capt. Yorkshire Hussar Yeomanry Cavalry, and major 7th West Riding Rifle Volunteers. Twice returned in the Liberal interest as member for the Eastern Division of West Riding (1880-85); Otley Division (1885).

"Fairleigh, Frank." See NOMS DE PLUME.

Fair Trade and Free Trade. The fair-trade movement, on which the late general election largely turned, affords perhaps the most remarkable illustration of the doctrine of reversion to be met with in the history of opinion. The men who fought and won the battle of free trade, forty years ago, achieved so unique a triumph that for upwards of a quarter of a century afterwards their opponents were completely silenced. In fact, the man who during that period had ventured to suggest the idea of reverting to a policy of protection in any form, would have been regarded as unreasonable as the man who advocated a return from astronomy to astrology or from chemistry to alchemy. After the nation, however, had begun to experience the disastrous effects of the general depression in trade, and the series of bad harvests commencing in 1873, a certain school of politicians began to question the efficacy of the free-trade gospel, and soon became bold enough to assert that, so far from its providing the means for our commercial salvation, the popular faith in it threatened to work out national bankruptcy and ruin. Amongst the earliest preachers of a protectionist revival in the form of reciprocity, retaliatory or countervailing duties, were Mr. MacIver, M.P. for Birkenhead, Mr. E. Sampson Lloyd, late M.P. for Warwickshire, and Mr. Eckroyd, late M.P. for Preston. Their speeches and pamphlets aroused the sympathy of the landowners and their tenantry, as well as of a considerable section of the manufacturing and the working classes; and the movement they inaugurated subsequently took shape in the formation of the **Fair Trade League**. At first the movement received little or no encouragement from the responsible leaders of the Conservative party, but continuing to grow in influence and importance, their attitude towards it became more friendly. The increasing depression in trade and the

number of industries which, owing to foreign competition, had become reduced to a languishing condition in striking contrast to their former prosperity—such as the sugar trade, and the shipping and agricultural interests—led the Conservative party, on their accession to power after the defeat of Mr. Gladstone's Government, to appoint a Royal Commission to inquire into the causes of trade depression. Prominent members of both political parties were invited to sit on the commission; but the free-traders, with one or two exceptions, declined the invitation given them, on the ground that in their opinion no good could come of it, as the causes of the depression were already well known. The objectors further contended that the inquiry would do much harm by creating an impression abroad that England was wavering in her free-trade faith, and that consequently great encouragement would be given to the protectionist party in those very countries whose tariffs we wished to modify in our favour. The Commission was finally composed of the following noblemen and gentlemen:—Lord Iddesleigh (chairman), Earl of Dunraven, Mr. Sclater-Booth, M.P., Mr. J. Aird, Sir J. Allport, Mr. T. Birtwistle, Mr. L. L. Cohen, M.P., Sir J. P. Corry, Bart., Mr. David Dale, Mr. C. J. Drummond, Mr. W. F. Ecroyd, Mr. H. H. Gibbs, Mr. W. H. Houldsworth, M.P., Mr. W. L. Jackson, M.P., Mr. G. A. Jamieson, Mr. N. Lubbock, Mr. P. A. Muntz, M.P., Mr. A. O'Connor, M.P., Mr. R. H. Inglis Palgrave, F.R.S., Mr. C. M. Palmer, M.P., Mr. W. Pearce, M.P. Professor Bonamy Price, and Mr. S. Storey, M.P.—Secretary, Mr. G. H. Murray, 8, Richmond Terrace, S.W.—The Commission commenced operations by asking the London and provincial chambers of commerce to report to them on the subject of inquiry—a request which some complied with and others declined to entertain. Subsequently the Commissioners held regular sittings for the examination of influential witnesses from the chief centres of industry; and the first of a series of reports which it is proposed to issue was published in the form of a parliamentary blue book, early in November last. Lord Iddesleigh, in an address delivered to the Exeter Chamber of Commerce on the eve of the general election, declared that the Commission would bring to light information of the greatest interest to the trading, manufacturing, industrial, and agricultural classes, whatever might be the conclusions at which the commissioners would arrive. With regard to the fiscal policy advocated by the fair-traders, a few of them, including Mr. James Lowther, Mr. Chaplin, and some of the other members of the Conservative party, have favoured the reimposition of small import duties on corn, as being likely to augment the revenue and to brighten the agricultural prospect, without perceptibly injuring the consumers. Generally, however, the fair-traders repudiate any desire to re-institute the corn laws, or even to impose protective duties. What they aim at is reciprocity or retaliation, with a view to the ultimate establishment of free trade "all round." The fair-trade position was best defined, perhaps, by Lord Bateman, in the speech in which he opened the debate on the subject in the House of Lords, on April 29th, 1879. "We had," his lordship said, "for a long time past been throwing away in the most gratuitous manner

many millions sterling of customs duties which had been either repealed or reduced, simply as sophs to the free-traders or as occasional sophs to disarm opposition." Continuing, he remarked, as reported by the *Times*, that "his own definition of reciprocity was that it was not necessarily protection, and that it was in reality mutual interchange and barter for the benefit of both parties. . . . He did not ask for protection, but he contended that if there were no reciprocity there could be no free trade. Reciprocity ought to be regarded as the coping stone of the free trade system. It was the one thing wanting to the establishment of that universal free trade which every body desired. He would illustrate the meaning of reciprocity by referring to the duties on tea. £1,000,000 was derived from our Indian empire. Now, the other day we had remitted £200,000 of cotton duties—that is to say, we made the Indian empire pay £1,000,000 on tea, and £200,000 for the cotton imported from this country. This was unfair. If we had done away with the £200,000 on cotton, and had at the same time relieved our empire from the £1,000,000 that was derived from tea, we should have been illustrating the principle of reciprocity." With regard to the practical application of the reciprocity principle, the fair traders propose a close federation between England and her colonies, and the establishment of internal free trade throughout the empire, but with the imposition of retaliatory or countervailing duties on imports from other countries. This is practically the fiscal arrangement carried out by the United States of America, which have perfect freedom of trade amongst themselves, but both for revenue and protective purposes heavily tax the products of the foreigner. With regard to the effects of imposing retaliatory duties, Mr. MacIver in a letter to the *Times* of November 16th, 1878 says: "If we want real free trade—as assuredly we do—we must go beyond the present teaching of British political economy and make it the interest of those who now exclude our manufactures to adopt a different policy. Our foreign friends who decline to understand the advantages that free trade offers would understand at once the disadvantages under which a British retaliatory tariff would place them. Those to whom I am opposed on such questions say sometimes I think unreasonably, that retaliatory tariffs to be effectual, must be prohibitory. They say, also, but I think only with partial truth, that we could only levy duties upon articles of food and they put forward as an axiom, I think upon insufficient data, that the entire cost of all such taxation would be borne by the British consumer. But it can easily be shown that retaliatory tariffs far short of anything prohibitive would, in many instances, 'turn the scale' in favour of purchasing from such nations as might be willing to accept British manufactures in payment for their productions. I think, also, that we are none the richer as a nation by continuing to import inferior French watches in Hall-marked cases, although the vendors who sell them as of British manufacture may become so; nor are we much the better for getting such things as French silk free of duty, when we cannot export woollen or cottons or anything else of home manufacture in return. And if, in the absence of retaliatory tariff, we do get some of our suga

little cheaper than would otherwise be the case, we are, I think, paying too dearly for such cheapness, in submitting to the extinction of British sugar-refining. But even a tax upon imported grain, unless universal, need not injuriously affect the consumer. Some portion of the burden would no doubt fall upon him, but some also upon the foreign producer. The foreigner would have to content himself with smaller profits; our untaxed grain-exporting colonies would be gainers in finding a better home market for their wares; and the consumer, able to pay in kind, could better afford to buy." Mr. MacIver, in conclusion, says: "We ought, as it seems to me, to face our national position in a business-like way, as any business man would in his own affairs; to realise that in adopting free trade without reciprocity a mistake has been made, and that our path cannot be too soon retraced. Once admit the principle that retaliatory tariffs may lawfully be used 'as a means to an end,' and there need be no difficulty in again finding markets for British manufactures, nor in so working our fiscal system as to strengthen the commercial ties with those magnificent colonies which I trust may long form with Great Britain one great united Empire."—"The free-traders in reply to all this maintain that it is hopelessly illogical, and that if it were not so, it would be altogether impracticable. Of the numerous recent works defending the principles of free trade, originally propounded by Adam Smith and subsequently emphasized by Ricardo and Mill, the ablest is the late Professor Fawcett's "Free Trade and Protection," of which a cheap edition has been issued by the Cobden Club. We may also mention the exceedingly able and vigorous reply to the free-traders contributed by Mr. A. J. Wilson, in a series of articles in *Macmillan's Magazine*, and republished in his volume of essays on "Reciprocity, Bi-Metallism, and Land-Tenure Reform." These authorities, while admitting that foreign tariffs in many instances operate injuriously to the British manufacturer, and that at the present low price of food resulting from our free-trade system British farmers cannot profitably compete with their foreign rivals, yet maintain that the fact of our being able to obtain our food and raw material on the lowest terms gives us an enormous advantage over other countries, and enables our manufacturers to compete successfully with all comers in the neutral markets of the world. As for the distress of our agriculturists, it is contended that the real remedy for it is not protection—which would merely have the effect it had in the old protectionist days, of sending up rents and increasing the price of bread without increasing wages—but the removal of the disabilities imposed upon our agriculturists by the various and repressive restrictions of our present land system. The free-traders hold that what is required for the completion of our national prosperity is not a limitation of the free-trade principle, but the extension of it to the transfer of land. "There are," says Mr. Chamberlain, "two essentials to the wealth of nations—free trade and free land. Protectionist countries which can make any show of perceptible competition with us have satisfactorily settled the land question by putting the people on the soil. As regards the manufacturing power of these countries, it is as much hampered by protective tariffs

as our food-producing power is by our land monopolists. All monopolies are bad, and protective tariffs tend to create monopolies and to maintain them at the expense of the community; for import duties are paid, not by the foreigners who send the goods, but by the people who consume them. Protection, in fact, no matter in what questionable shape it comes to us, is, the free-traders contend, merely a device for enriching the few at the expense of the many. Moreover, it does not enable the protected foreigners to compete outside their home markets with the unprotected English manufacturers. England is by far the greatest manufacturing power in the world, and the assertion that she is being beaten in neutral markets by foreign rivals is disputed. It has for some time past been commonly reported, for instance, that the American cotton manufacturers are ousting their Lancashire rivals from the Chinese markets. This view is far from being supported by the Shanghai correspondent of the *Times*, who, writing on November 14th, 1878, said:—"The discussion in England as to whether the decay of our empire, commercial and otherwise, has not begun, and the confident assertion of the future supremacy of America by an eminent statesman, have caused some amusement here, as well they might. So far as regards China, the decay is quite the other way: the position and trade of American firms here seem yearly to decrease, their local carrying trade is extinct, and their import of cotton piece goods small, unprofitable, and much less significant than certain rhetorical statisticians would have us believe." He then goes on to show that the American imports of cotton goods by China were only 1.49 per cent., compared with the English imports of 74.39 per cent. Mr. A. J. Wilson, writing in 1880, showed that the total exports of manufactured cotton goods from America were less than a twentieth of our own. Further, the free-traders show that tariffs only protect manufacturers even in their home markets up to a certain point. All depends upon a nation's purchasing power when trade is depressed; and protected countries, it is asserted, suffer more from periodical depression than free-trade countries. Purchasing power collapses; but when trade revives, purchasing power is able to pay a high price for foreign as well as for home products. Hence, whenever there is a spurt of railway enterprise in the United States, our English makers of steel rails, in spite of the high tariff, can always compete successfully with the American makers. Again, the free-traders contend that protective tariffs increase the cost of production, and that accordingly protected countries not only cannot compete with free-trade countries in neutral markets, but can only inflict partial injury by competing in our own free-trade markets. The fact that the total value of our imports of foreign manufactures is trifling compared with the enormous bulk of our own manufactured exports seems to bear out this view. Particular industries are injured by our admission of foreign goods duty-free, but the community is benefited. The sugar-refining business, for instance, is injured by our admission of the bounty-fed sugar of France, Holland, and other countries; but all those industries depending upon cheap sugar—the jam, sweetstuff, and confectionery business, for

instance—as well as the consumers of sugar, are considerably benefited. Lord Salisbury, in his speech at the Victoria Hall in November 1885, though avowing himself a free-trader, and protesting against the taxing of food and raw materials, thought there could be no harm in trying the experiment of retaliatory duties upon manufactures. The free-traders show, however, that some manufactures are the raw materials of others, and that it is practically only woollen and silk manufactures and refined sugar which are imported in sufficient quantities to be worth taxing at all, and that France and Holland only would be punished by our restricting these imports. Our trade to and from Holland is a steady and profitable one, owing to the fact that the Dutch tariff is comparatively light; and we also do a large trade with France. Would it be worth our while, ask the free-traders, to declare a war of retaliation against these countries, in which we should probably be defeated if we did? Lastly, free-traders assert that the enormous advantage of the application of their doctrine is proved by the fact that England is not only the greatest manufacturing power, but has secured for herself the bulk of the carrying trade and the banking business of the world.—The first report of the Commission was issued on February 7th, 1886. It contains the evidence of **Mr. Giffen**, of the Board of Trade; **Mr. C. M. Kennedy**, Head of the Commercial Department of the Foreign Office; **Mr. S. Seldon**, Principal of the Statistical Department of the Customs; **Mr. E. P. Harding**, Chief Receiver in Bankruptcy; **Mr. J. S. Puroell**, Registrar of Joint Stock Companies, and Controller of Stamps; **Mr. A. West**, Chairman of the Board of Inland Revenue; **Mr. J. A. Crowe**, Commercial Attaché to Her Majesty's Embassy at Paris; and **Mr. D. E. Colnaghi**, Consul-General at Florence. The report further contains the replies sent by various Chambers of Commerce to inquiries as to the state of trade sent to them by the Commission.

Faith Healing Home. This institution, called **Bethan** (10, Drayton Park, Holloway Road), under the charge of Mrs. Boardman, Mrs. M. Baxter, Miss C. C. Murray, and Miss Sisson—founded on one interpretation of St. James v. 14, 15—receives on an average about a dozen inmates at a time, who remain generally not more than two or three weeks seeking for Divine healing from their maladies or any illness they may be subject to. The principal weekly meeting is held on Wednesdays, at 3 o'clock p.m., when experiences of Divine healing are given by persons coming from different places; and an anointing meeting is held afterwards, for anointing with oil any who may desire it. There are also religious meetings for addresses on holiness and faith healing every Friday evening, and on Sunday mornings, afternoons, and evenings, in a large hall attached to the building. The institution was established 1880. The organ of the movement, "**Thy Healer**," is edited by Mrs. M. Baxter (fortnightly).

Falk Laws. See **GERMANY**.

Falmouth, Evelyn Boscawen, 6th Visct. (creat. 1720); b. 1819; succeeded his cousin, the 2nd Earl of Falmouth, in the viscounty and barony only (1852).

False Imprisonment. Is defined in *Addison on "Torts"*, p. 128, ed. 5, as "a trespass

committed by one man against the person of another, by unlawfully arresting him and detaining him without any legal authority." This trespass may be committed by the smallest unlawful interference with a man's liberty. The unlawful detention may not last a quarter of an hour. It may be effected without any use of physical force, and without any confinement of the person. Thus, if a police constable, without lawful reason for so doing, order a passer-by to go with him, and the passer-by obeys, there is ground for an action of false imprisonment. But a partial restraint of the person does not constitute a false imprisonment. Thus it is no imprisonment to prevent a man from taking some particular path. False imprisonment grounds an action for damages, and these will be exemplary.

Familistère, The, at Guise, Department of Aisne, France, is a most successful attempt and almost the only successful attempt in France and elsewhere, by **M. Godin** towards realising Fourier's plan for the elevation of the masses, and harmonising both capital and labour. **M. Godin**, forty years ago, began, with four workmen, to make stoves and cooking ranges from cast-iron. He soon found himself a rich man, and immediately set to work on his great experiments: to assemble all who worked with him in one large building, and to let each workman have a share in the profits of the business proportionate to the value of his work. His large building, the **Familistère**, now consists of a central pavilion, 216 feet long by 133 feet deep, and two wings of almost equal size, and contains rooms enough to accommodate in comfort 400 families. The rooms are ten feet high on all the four floors, and **M. Godin** himself lives there with his family. The cost of the building has been at the rate of about £44 per inhabitant, and the rent charged averages about 8s. per month for two rooms, which represents about 3 per cent. on the outlay. The rooms in each of the three blocks look out upon a courtyard paved with cement and roofed in with glass, while a gallery runs round each side of the courtyard upon every story, and the floor of the courtyard serves as a playground for the children in bad weather. Opposite this social palace are the foundries and workshops. They cover an area of 160,000 square feet, with nearly five miles of tramway, and give employment to 1,200 workmen, of whom about 550 live in the Palace, while the other 650 lodge in the town, like the workers of any ordinary factory. The rule is that the men are not to work more than three and a half hours at a stretch. The first stretch is from 6 to 9 in the morning; the second from 10 a.m. to 1.30 p.m., and the third from 3 to 6.30 p.m. The wages average about 26 francs a week, but they are not the only source of income. Nearly all the workmen are shareholders in what is called "**The Cooperative Association of Capital and Labour**," with a capital of £180,000. The Association pays **M. Godin** 5 per cent. interest on his capital, or £9,000 a year, and furthermore a salary of £600 as managing director, and has for the last few years made a profit of 8 per cent. There are 820 active members of the Association. They have an insurance fund, a medical fund, and a burial fund. In the Palace are found schools, the education given in which is above the standard of a good many schools in France. It contains stores which supply almost every article of daily consump-

tion, and the profits of which are divided in equal proportions between the Association and the purchasers. Lastly, it has a nursery, divided into two parts: one for children in the cradle, and one for those just learning to walk, where mothers who have their household duties to attend to, or who are employed in the stores, the laundry, or the shop for stocking-making, recently opened, can leave their children in safe keeping. The Association publishes a semi-weekly newspaper, *Le Devoir*. It is a very suggestive fact that this successful enterprise, which now for some years has been pretty well known throughout the world, has had no imitators. First, it suggests that there can be but few capitalists with the large benevolence and enthusiasm of M. Godin. But neither has it exercised any influence on the working-classes of the world. The reason, undoubtedly, is that Fourier's ideal is not a high one; he, as Mazzini pointedly said, only aimed at organising "the kitchen of humanity." The success of the *Familistère* has been purely material; no social impulse has issued, or is likely to issue from it. Yet it deserves to be studied. See CO-OPERATIVE (APARTMENT) HOMES.

Family Settlements. See LAND QUESTION, THE.

Famines in India. Owing to the irregular rainfall and other concomitant evils of a tropical climate, aided by the enormous grain exports, Indian famines are not uncommon nor trivial. In the early years of British rule there were terrific famines, especially in 1770, 1783 and 1790-2. In 1860-1 half a million human beings were said to have perished, and this in spite of the enormous sums of money that were collected and forwarded out by England and other countries. The loss of life in the terrible famine of 1865 was estimated at two millions. The famine of 1873 was very successfully met by strenuous efforts and relief operations, but at a cost of £10,000,000. Another famine occurred in 1876-7, owing to the deficient rainfall over parts of Madras, Bombay, Hyderabad and Mysore, but large imports of grain and individual generosity counteracted the chief ill effects of it. The more recent famines have been much less costly in life than the earlier ones, when relief measures were entirely unorganised. See INDIA.

"Fane, Violet." See NOMS DE PLUME.

Fanmakers, The Worshipful Company of. See CITY GUILDS, THE.

Fargus, Mr. Frederick John, better known as "**Hugh Conway**," was b. 1847. Inspired by the perusal of Marryat's novels with a desire for the sea, he at the age of thirteen (1861) entered the school frigate *Conway*, where he greatly distinguished himself in his studies. Abandoning the idea of a seafaring life, young Fargus left the *Conway* and was placed at a private school, where (1865) he wrote a burlesque, which he sent to Mr. W. Robertson, who recognised the genius shown by the young author. After leaving school he entered for a time into mercantile life, which he pursued until the death of his father. After writing several songs and contributing to various magazines and newspapers under the *nom-de-plume* of "**Hugh Conway**," he became suddenly popular by the production of his most famous work, "**Called Back**," which, both as a novel and in its dramatised form, met with an enthusiastic reception. He has written several works

besides his earlier productions—"A Life's Idylls and other Poems," "The Daughter of the Stars"—among which may be noticed "**Dark Days**," placed on the stage at the Haymarket (1885). Mr. Fargus died May 15th, 1885.

Farming, Co-operative. See AGRICULTURAL HOLDINGS.

"Farningham, Marianna." See NOMS DE PLUME.

Farquharson, Mr. Henry Richard, M.P., of Tarrant Gunville, Blandford, was b. 1857, at Brighton. Educated at Eton and Jesus College, Cambridge. Returned in the Conservative interest as member for West Dorset (1885).

Farquharson, Dr. Robert, M.P., was b. 1836. Educated at Univ. of Edinburgh, graduating M.D. (1858). Late Assistant Surgeon in the Coldstream Guards. Deputy Lieutenant and J.P. for Aberdeenshire. Returned in the Liberal interest as member for West Aberdeenshire (1880-85); re-elected 1885.

Farrar, Frederick William, D.D., Archdeacon of Westminster, was b. at Bombay 1831. Educated at Cambridge, where he graduated with distinction. Head Master of Marlborough School. Canon of Westminster and rector of St. Margaret's (1876). Canon Farrar is a prolific writer, his chief works being "**Life of Christ**" (1874), "**Life of St. Paul**," "**The Early Days of Christianity**," etc. Canon Farrar has recently returned from a visit to the United States, where he met with a most enthusiastic reception.

Farriers, The Worshipful Company of. See CITY GUILDS, THE.

"Farthing Poet." See NOMS DE PLUME.

"Faust." See IRVING, HENRY.

"F. D. M." Club, an association of admirers of the late Rev. Frederick Denison Maurice, founded for the discussion and dissemination of his views on Christian socialism.

Federal Council, The German. See GERMANY.

Federation, Australian. See AUSTRALIAN FEDERATION.

Federation, Imperial. See IMPERIAL FEDERATION.

Fellden, Lieut.-Gen. R. J., M.P., was b. 1824. Served with distinction in the army. C.M.G. for services in the Red River expedition. Returned in the Conservative interest as member for North Lancashire in the last parliament; Chorley Division (1885).

Fellowes, Captain William Henry, M.P., the eldest son of Mr. Edward Fellowes, of Ramsey Abbey, Hunts, and Haverland Hall, Norfolk, was b. 1848. Educated at Eton. Sub-lieutenant 1st Life Guards (1867), lieutenant (1868), captain (1872), retired (1877). Married (1877) Lady Rosamund Jane Frances Spencer-Churchill, second daughter of the seventh Duke of Marlborough. Is a J.P. for Huntingdonshire. Returned in the Conservative interest as member for Huntingdonshire (1880-85); North Huntingdonshire (1885).

Felo de Se. This term would appear to be a barbarous Latin equivalent for "a felon in respect of himself." It is applied to a person who commits self-murder. Formerly the goods of such a person were forfeited to the Crown, and his body was interred in an ignominious manner. But the forfeiture was abolished by the Felony Act of 1870, and the ignominious burial by an Act of 1882. The old law on these matters had already become obsolete.

Feltmakers, The Worshipful Company of. See CITY GUILDS, THE.

Fenians. Members of a secret society formed originally in America, to overthrow the authority of the Queen in Ireland and establish an Irish republic. Its founders were James Stephens and John O'Mahony. Recruited from the Irishmen who had served in the civil war in America, it at one time included a large number of members; was said to have no less than 15,000 in the British army; and had branches in almost every part of Ireland. The Lord Lieutenant made an attack on the conspiracy in 1865, and seized the "**Irish People**," the organ of the movement; John O'Leary, Thomas Clarke Luby, and O'Donovan Rossa, and afterwards Stephens, the chief of the conspiracy, were arrested; O'Leary, Luby, Rossa, and several others were convicted and sentenced to penal servitude; but Stephens escaped from Richmond prison through two prison officials, and lived in Paris until he was expelled from there by the ministry of M. Ferry. In 1867 an attempt was made at an insurrection in various parts of Ireland; but they were easily put down. Several others of the leaders were tried, and sentenced to death, but were ultimately sent to penal servitude. In connection with the conspiracy a policeman lost his life in Manchester, where a party of Irishmen rescued Kelly and Deasy, two Fenian leaders, from a prison van; and three members of the body—Allen, Larkin, and O'Brien—were subsequently tried, convicted, and hanged. With the same object of rescuing a Fenian leader named Burke, in Clerkenwell prison, a barrel of gunpowder was placed opposite the prison, and exploding, it killed several persons and wounded many others. A man named Barrett was convicted of and hanged for the crime.

Fenwick, Mr. Charles, M.P., of Bebside, Northumberland. Is connected with mining industries, and has held prominent positions in the Northumberland Miners' Association. Returned in the Liberal interest as member for Wansbeck Division, Northumberland (1885).

Ferguson, Mr. Robert, M.P., son of the late Mr. Joseph Ferguson, of Morton, Liberal M.P. for Carlisle (1852-57), was b. at Carlisle, 1817, and in conjunction with Sir Wilfrid Lawson was elected in the Liberal interest for Carlisle (1874-85). Mr. Ferguson is the senior member of Ferguson Brothers, silesia manufacturers, Carlisle. He is the author of various philological works—amongst others "The Northmen in Cumberland and Westmoreland," "The Teutonic Name System," "English Surnames," etc. Returned unopposed 1885.

Ferguson, The Rt. Hon. Sir James, P.C., K.C.M.G., C.I.E., of Kilkerran, Ayrshire, son of Sir Charles Dalrymple Ferguson, was b. at Edinburgh in 1832. Educated at Rugby School. Hon. Colonel Royal Ayr and Wigton Militia. Formerly in the Grenadier Guards; was wounded at the battle of Inkerman. Has held the following official appointments:—Under-Secretary of State for India (1866-67), for the Home Department (1867-66), Governor of South Australia (1868-72), of New Zealand (1873-74), of Bombay (1880); member of the Privy Council (1868). Married 1st (1859), Lady Edith Christian, second daughter of the Marquis of Dalhousie; and (1873), Olive, youngest daughter of Mr. J. H. Richman, of South

Australia. Returned in the Conservative interest as member for Ayrshire (1854-68); North-East Manchester (1885).

Fermanagh, Baron. See ERNE.

"Fern, Fanny." See NOMS DE PLUME.

Ferranti's Dynamo. See DYNAMO.

Ferrers, Sewallis Edward Shirley, 10th Earl (creat. 1711); b. 1847; succeeded his father 1859.

Ferrol. See SPAIN.

Ferry, Jules François Camille, distinguished French juriconsult and statesman, b. at St. Dié, Department of the Vosges, 1832. He was called to the French bar 1854. Making himself conspicuous by his opposition to the Empire, and as one of the "thirteen," he was, in 1864, tried and condemned. In 1869 he was returned for the Corps Legislatif, and became from that time a prominent member of the Left under the Empire. The revolution of Sept. 4th, 1870, made him a member of the Government of National Defence. In 1871 he was returned to the National Assembly for his native department of the Vosges. He was afterwards Prefect of the Seine, but soon resigned. From 1872 to 1873 he was appointed French Minister at Athens. He was returned at the general election for his native *arrondissement* (1876-7). In May 1878 he was one of the vice-presidents of the Budget Committee, and in 1879 Minister of Public Instruction and the Fine Arts. As Minister of Education he brought in a bill directed against the Jesuits and their influence in schools. The Chamber of Deputies passed the bill by large majorities, but the Senate rejected it (1879 and 1880). The cabinet revived disused laws and expelled the Jesuits by decree. Difference of opinion arose, and the Ministry fell. M. Ferry was Prime Minister (1880-81), his cabinet resigning on the question of the Expedition to Tunis. He became Prime Minister again (Feb. 1883), but his ministry was overthrown (1885) by an adverse vote relative to the war with China.

Feudal System, The—the name given to the present and past day "**truck system**" of paying for work done by inferior high-priced goods—has worked much mischief among the working population, artisans, labourers, and others. Those employers, and "middlemen," "butties," "gangers," or "bailiffs," who kept "**tommy shops**"—i.e., stores where all kinds of goods, beer, and other things, were kept to supply the wants of their workers—were not, as a rule, long in making their fortunes out of the double profits of the inferior goods at exorbitant charges levied upon the men and women. The evils of the "truck" system told heavily upon the prosperity of the workers and the country. But they were not allowed to pass unnoticed by parliament. Royal Commissions have been appointed to look into the matter during the last thirty years, and various Acts of Parliament to stop the evils have been the outcome; and as the result of the Acts, and the carrying out of the Factory Acts of various kinds, including George Smith of Coalville's Brick-fields and Canal Boats Acts, we have a better and steadier class of workers. The last Act to put a further check on the "truck" system was the "Prohibition of the Payment of Wages in Public-houses Act of 1884," introduced by Mr. Samuel Morley and Earl Stanhope, and supported by Mr. Burt, Mr. Broadhurst, and other prominent M.P.s and influential philanthropists. This Act, if properly carried out,

will tend greatly to develop thrift among the working classes.

Feuillet, Octave, French novelist; b. at Saint-Lô (Manche), August 17th, 1820. His first literary production was "Le Grand Vieillard," a novel under the *nom-de-plume* of "Désiré Hazard," which appeared in the columns of the *National*. "Le Roman d'un Jeune Homme Pauvre" (1854) raised Feuillet to the first rank of the novelists of the day; this work was also dramatised. Feuillet was elected member of the Academy in 1862. In 1863 he was made an Officer of the Legion of Honour. Under the Empire, Feuillet was the librarian of the imperial residences.

Feversham, William Ernest Duncombe, 1st Earl (creat. 1868); b. 1829; succeeded his father in the barony 1867. Was M.P. for East Retford (1852-57), and for the North Riding of Yorkshire (1859-67).

Field, Captain Edward, R.N., M.P. Is J.P. for Hants, and Chairman of the Fareham Divisional Bench and Gosport Petty Sessions. While in the navy he was actively engaged in the operations carried on by the combined English and French fleets in the rivers Plate and Paraná. For several years gunnery instructor at Portsmouth, on board H.M. Ship *Excellent*. Promoted to the rank of commander (1858); post captain (1869). Returned in the Conservative interest as member for South Sussex (1885).

Fieri facias, Writ of. A writ of execution, that is to say, a writ issued for the purpose of giving effect to the judgment of a court of justice. It is a command to the sheriff that of the goods and chattels of the party, he cause to be made (whence the Latin name of the writ), the sum recovered by the judgment, with interest thereon at 4 per cent. from the day of judgment or order (or from the day on which the money was directed to be paid, or from which interest was directed to run as the case may be), together with the costs and the interest thereon similarly accruing, and that he have the money and interest in court immediately after such execution to be paid to the party who sued out the writ, and that he have the writ itself before the court, immediately after execution.

Fife, Alexander William George Duff, P.C., K.T., 1st Earl of (creat. 1885); b. 1849. Succeeded his father in the Irish peerage (creat. 1759) in 1879. Was M.P. for Morayshire and Nairn (1874-79).

Fifa. See SCALE (MUSIC).

Figueras. See SPAIN.

Fiji. An island group in the South Pacific. A British Crown colony, annexed 1874. Name a corruption of Viti, the native name. Consists of two considerable islands: **Viti Levu**, 4,250 sq. miles; **Vannua Levu**, 2,600 sq. miles; and 225 smaller. Total area 8,050 sq. miles. Capital Suva, in Viti Levu; second town Levuka, in Ovalau. European population, 3,367; Native, 111,743; Coolies, 9,894. Mountainous, well wooded, luxuriant vegetation and fertile soil, tropical. Industries are growing sugar, coffee, cotton, cocoanut, arrowroot, tapioca, etc., which form exports £345,344. Imports £434,522. Revenue £91,523; expenditure £98,468; debt £150,000. Natural productions are fruits, pearl-shell, beche-de-mer, timber, dye and scent woods, etc. Natives Polynesian with Papuan intermixture. Colony divided into fourteen provinces. Ruled by

Governor and officials. Native chiefs appointed over districts. Fijians are peaceable, orderly, and are becoming christianised and civilised. (Consult Horne's "Year in Fiji," and Cooper's "Coral Lands.") Climate fairly healthy. Island of Rotumah, to the north, annexed to Fiji in 1881.

Filbert Trees. See FRUIT FARMING.

Financial Statement of London School Board. See APPENDIX.

"Fin Rec." See NOMS DE PLUME.

Finch, Mr. George Henry, M.P., was b. 1835. Educated at New College, Oxford. J.P. for Rutland and hon. major in the Leicestershire Yeomanry Cavalry. Returned in the Conservative interest as member for Rutland (1885).

Finch-Hatton, The Hon. Murray Edward Gordon, M.P., is the second son of the 10th Earl of Winchelsea. Educated at Eton and Balliol Coll., Oxford; Fellow of Hertford College. High Sheriff of Lincolnshire (1879). Returned in the Conservative interest as member for Spalding Division, Lincolnshire (1885).

Findlater, Dr. Andrew. See BOOK TRADE.

Fingall, Arthur James Plunkett, 11th Earl of (creat. 1628); Baron Fingall (1831), by which title he holds his seat in the House of Lords; b. at Rome, April 1, 1859; succeeded his father 1881. The earldom of Fingall was conferred by James I.

Fingoes. See KAFFRARIA.

Finlay, Mr. Robert Bannatyne, M.D., Q.C., M.P., was b. 1842. Educated at Edin. Univ., graduating M.D. (1863). Called to the bar (1867); Q.C. (1882). Returned in the Liberal interest as member for Inverness Burghs (1885).

Finlayson, Mr. James, M.P., b. at Dunfermline, 1823. Returned in the Liberal interest as member for East Renfrewshire (1885).

Finucane, Mr. John, M.P., was b. 1842. Connected with agricultural pursuits, and is a leading member of the old Limerick and Clare Farmers' Club. Returned as a Nationalist for East Limerick (1885).

Fire and Life Insurance Business in 1885.

For several years past fire insurance companies have experienced a growing difficulty in making any considerable profits. They had been hard hit generally at the close of the year 1884, and at the beginning of 1885 they found it necessary in many cases to raise their rates. Unfortunately all experience has shown that higher rates usually mean a smaller volume of business done. It was so in this instance. Until the "conditions of average" are more generally applied to insurance covering manufacturing and trade risks, this state of things will probably not change for the better. The public fears were not stimulated during the year by any very dramatic disasters, and therefore outsiders were not driven to insure in exceptional numbers; but the year was nevertheless a bad one for fire offices. The **Clerkenwell fire**, where about twenty buildings were destroyed, cost them nearly £200,000. Corn mills are the most dangerous class of buildings the offices deal with, and in 1885 losses to the extent of more than £170,000 were incurred by fires in these mills. The premium income from this class of risk is estimated at something less than £100,000 gross; and under these circumstances it is not surprising that a "Tariff Office Committee" is engaged in adjusting a new tariff for this class of business. The losses have occurred chiefly in what are called "new process" or

"roller" mills; and it is believed by the companies that with a little more care on the part of milling engineers, the losses ought to be greatly diminished. Next to corn mills fire companies suffer most from cotton mills. The loss on this class of risks is more than £300,000 a year. A new issue of the cotton mill tariff is to be made this year. At present every office takes its own course in accepting these risks, and there is some reason to suppose that as the result these risks are taken at a smaller price than experience justifies. The reorganisation of the Metropolitan Fire Brigade is one of the objects the offices have steadily agitated for during the past year, and it is one which in the end they will certainly obtain. With respect to life insurance business the year 1885 was one of unbroken prosperity. There is no adequate reason why a well conducted office should not do a thoroughly sound business at all times, provided it is strong enough to dispense with expensive agencies, and is exempt from the epidemics incident to less temperate climates than our own. Given these two conditions, and there is no business in the world of a safer character than that of life insurance. One new office, the *Scotch Economic*, came into existence during the year. Since the *Act of 1870* it is necessary to deposit £20,000 with the Board of Trade before an office can commence business. This has been done in the case of the new office, and it commences business with a sufficient working capital in addition to this deposit. The *Health Insurance Association of London* and the *Sickness and Accident Association of Edinburgh* are not exactly life offices, but their objects are so analogous to those of life offices that they deserve mention in a sketch of the year's operations. From new companies we pass by a natural transition to those which have closed their doors. Of these there was happily but one in England—the *Emperor*. Its policies were taken over by the *Whittington*. The *Royal Farmers' and General* has ceased to transact life business, but as there is no suggestion that the institution is not established on a thoroughly sound footing, it must be assumed that the only object the directors had in view was to get rid of a kind of business which was not important enough to their office to be remunerative. A *Medical Attendance Association*, which never had much prosperity, was wound up. The *Briton Life Office* is to be separated this year from the *Briton Medical and General*. These are all the changes to be recorded at present. In *France* the collapse of the *Credit Viager* is a calamity almost as great as those of the *Albert* and *European* in England. It is a highly significant sign of the times of how great the necessity is to seek outside the boundaries of Great Britain for suitable investments, that the *Scotch Widows' Fund* has found it desirable to send an agent to the Colonies to superintend its investments; and this of course means that a special department is to be created in order to look out for a more remunerative rate of interest in Australia and our other colonies than can readily be found in the home market. The only considerable case in the law courts last year affecting insurance companies was the well-known and somewhat notorious investigation into the circumstances connected with the death of a *Mr. Lottinga*. The jury at the first trial disagreed; in the second trial *Mrs. Lottinga* was successful. Another case,

but of much less importance, was an action against the *Sun Life Office* by the executors of a *Mr. Canning*, a person who had proposed an insurance and was accidentally killed before paying the first premium. His executors asked the office to pay the amount proposed to be assured, which the *Sun Office* naturally declined to do. Their refusal was subsequently supported by the courts, who held that the office had never undertaken the risk. 1885 was chiefly remarkable in life insurance circles for the changes it witnessed in the management of many of the world's chief offices. *Mr. John Fraser*, the chief spirit in the creation of the *Life Association of Scotland*, passed away; and so also did *Mr. John Messent*, of the two *Briton Companies*. *Major-General Hamington*, of the *India Office*, a member of the Council of the Institute of Actuaries, died suddenly in the spring. *Sir Moses Montefiore (q.v.)*, president of the *Alliance*, and *Mr. Winston* the president and *Mr. Andrews* the vice-president, of the largest insurance company in the world—the *Mutual of New York*—also died in 1885. There was an exceptionally large number of vacancies and promotions in our home offices, but in spite of this the year was an uneventful and therefore a prosperous one. It closed with a strong agitation against one or two friendly societies, which, rightly or wrongly, were believed to spend more on management and on agency than was consistent with a proper regard for the interest of the assured. One of these institutions was the *Royal Liver Friendly Society*, whose headquarters are in Liverpool. So pronounced did the agitation become that the Chief Registrar of Friendly Societies ultimately appointed the *Hon. Lyolph Stanley* to investigate the Society's affairs—an investigation which commenced in Liverpool on January 12th, 1886, and has recently been concluded.

Fire Detector and Alarm. See FIRE EXTINCTION.

Fire Engine, Self-acting Pneumatic. See FIRE EXTINCTION.

Fire Extinction. Methods of fire extinction of various kinds have been in use from very remote times, and in all countries. *Haydn* goes as far back as *Utenibius*, B.C. 250; and modern travellers inform us that the branded felons of *Burmah* find it part of their duty to extinguish the frequent fires bursting forth amongst the flimsy structures of the *Burmese* cities. *Bramah's* fire engine, patented in 1793, and *Braithwaite's* steam fire engine of 1830 are well known; while *Messrs. Merryweather and Sons* and *Messrs. Shand and Mason*, of London, are perhaps the modern representatives of all the improvements in this direction, their powerful machines being in use all over the world. The question of coping with a great conflagration in such a crowded area as London has been well considered and provided for. The *Metropolitan Fire Brigade*, under the control of the *Metropolitan Board of Works*, numbered, in 1885, some 668 officers and men; it is supported by a halfpenny rate and contributions from the Government and the Insurance offices, an *Act* calling it into existence being passed in 1865. Stations are scattered about the *Metropolis* supplied with steam fire engines drawn by horses, with fire escapes of the newest design, blankets, etc. Also at different points there are sleeping vans with men on duty night and day, furnished with manuals and

hose reels for immediate requirements. All the stations are connected by telegraph, and the streets are supplied with "alarm posts" on the Berlin method, by which any person may give the electric alarm. It is not too much to say that in every respect the Metropolitan Fire Brigade, which is largely recruited from ex-seamen of the Royal Navy, has proved highly efficient, even when confronted with very formidable outbreaks. London is moreover further provided with the **Fire Salvage Corps**, which was formed in 1865 by the various fire insurance offices. Various developments in the direction of fire extinction have been made known from time to time—such as **Mr. W. Dennis's** portable self-acting pneumatic fire engine, successfully tried on the Thames November 1876. But recent research has been made more in the direction of employing other aids besides or in conjunction with water, one reason perhaps being that the damage done by the tons of fluid thrown upon a burning building is second only in importance to that caused by the fire itself. Of this class may be mentioned first in chronological order the well known **L'Extincteur**, said to have been invented by **Dr. F. Carlier**, and patented by **M. Vignon**, in 1862. It is described as an iron cylinder filled with water and carbonic acid gas generated by bicarbonate of soda and tartaric acid; the apparatus was improved upon by **Mr. W. B. Dick**; patent granted 1866. **M. Benolais**, of Paris, exhibited his "**Fire Killer**" at the Alexandra Palace in October 1880, and successfully subdued the flames with remarkable rapidity. In February 1883 **Foster's** patent was tried on the Thames Embankment near Blackfriars Bridge. In this case the idea was to throw upon the flames carbonic acid gas conveyed in water, and partly by means of compressed air. After the engine is filled with water the fluid is pumped into a cylinder supplied with chemicals, where it is stored under a high pressure of compressed air. By merely turning a handle the pure water only is discharged, or the chemicalised water, at pleasure. The experiments were highly successful, the carbonic acid gas set free with the expansion of the compressed air having a remarkable effect considering the small quantity of fluid used. One of the most striking and complete among recent appliances is the **Harden "Star" Hand Grenade** fire extinguisher. This consists of a glass flask, which is hermetically sealed after being filled with a chemical fluid. The main object is to check an outbreak in its incipient stage; and it is claimed for the invention that when a "Grenade" has been flung into the burning mass, and the flask breaks, the contents vaporise at once, and as the surrounding oxygen is destroyed, combustion also ceases. Among the advantages claimed are the following:—The "Grenade" is always ready for use; it does not deteriorate by age or climate; may be used by any one, and the fluid is harmless to person or fabric. The proprietorship of the patent is vested in a public company, with their headquarters in London, and the handy appliance appears to have been widely adopted in public institutions, places of business, and private houses. There is also the more elaborate automatic apparatus whereby the heat arising from an unseen fire in a room causes by automatic action the flow of water to commence the work of suppression at once. **Professor Grochi** exhibited at the Inter-

national Exhibition of 1873 a fire detector and alarm, whereby a bell was rung and a coloured light was exhibited when the temperature in a building passed a given height. Of fire preventatives, a chemical preparation called "**Anti-Pyrogen**" was exhibited at Berlin in 1881; and there are condiments for rendering wearing apparel fire proof. **Dr. Tyndall**, the scientist, has also invented a fireman's respirator, which is a modification of **Dr. Stenhouse's** charcoal respirator.

• "**Fire Killer.**" See FIRE EXTINCTION.

Fireman's Respirator. See FIRE EXTINCTION.

Fire Salvage Corps. See FIRE EXTINCTION.

Fish Commission, United States, The. See MARINE BIOLOGICAL LABORATORIES.

Fish Culture. The art of fish culture is divided into two branches: first, that in which the natural conditions under which fish live and thrive are brought up to the highest pitch of perfection—without, however, interfering directly with the ordinary processes of nature; and second, that in which artificial interference is so far-reaching as to change the character of the natural circumstances under which fish exist, if not actually to supersede them altogether. The first branch of fish culture has been practised ever since the time when the Romans used to import oysters from Britain, and place them in Lake Fusaro, where special provision was made for their reception, and for the rearing of the "spat," or young oysters; or when they introduced exotic fish, such as the *varus*, from the waters of the *Ægean* Sea into those of the Italian coasts. The abbots and monks of the Middle Ages practised one branch of fish culture when they fattened the carp and other fish that lived in the ponds or "stews" which they invariably constructed in the immediate neighbourhood of their monasteries and abbeys. The second branch of the art, which may or may not be made subsidiary to the first, is of much more recent date. It originated in the discovery that the eggs of fish—those of salmon were first experimented upon—may be taken from the body of the parent fish, impregnated with the milt from the male, and "hatched" in a trough of water kept at the proper temperature, under circumstances analogous to those in which hen's eggs may be hatched in an incubator. So far, indeed, can nature be departed from in the case of fish eggs, that whereas under natural conditions the female fish deposits her eggs (the hard roe) in the water, when they are immediately afterwards impregnated by the spermatozoa in the milt (or soft roe) of the male fish, the ova may be taken from one fish, deposited in an open vessel, and the milt may be taken from another fish, and provided the latter be meanwhile excluded from the air, the two may be mixed together many hours—even days—afterwards, and impregnation will be effected even more successfully if no water is used than if the whole process were conducted under natural conditions in the river. The ova thus fertilised are placed in a suitable vessel, either with or without a layer of gravel at the bottom (in imitation of the bed of a stream), or on rows of glass rods or other appliances; and if a current of water at a temperature of about 40° is kept constantly running through the vessel the development of the embryo fish will proceed, and in about ninety

or a hundred days—more if the temperature is lower and less if it is higher—the young fish will be hatched. These may be either kept in artificial tanks or streams, and kept regularly supplied with the requisite amount of food, or they may be placed in a stream and left to look after themselves under natural conditions. The two branches of fish culture may thus be likened to agriculture in the open field on the one hand, where art only interferes to keep down weeds and destructive enemies, and to encourage or supplement the natural supply of nutriment; and, on the other, to hothouse culture of plants, where art supplies nature altogether and supplies everything that is needed. As in agriculture, so in fish culture, the two systems may be combined; and like seedlings artificially forced and afterwards planted out in the open, the young fish artificially bred may be turned out into the natural stream. The development of salmon and trout eggs may be retarded, by keeping them at a reduced temperature (just above freezing point), sufficiently long to enable them to be transported to Australia or New Zealand; and in this way these fish (or at least trout) have been introduced into the waters of the Antipodes, to which they are not indigenous. The ova of cod, herring, shad, whitefish (*sergons*), and other fish have also been artificially impregnated and hatched; but the possibility of transporting these and other eggs to long distances is limited by the period of "incubation," which is much shorter than in the case of the salmon and trout. Whether the breeding of sea fish by artificial means will ever be productive of practical results in increasing the supply of fresh fish is a disputed question, but that inland waters may be stocked with family freshwater fish, and with anadromous fish by this means, has been clearly demonstrated. In America the practice has been carried out on a very large scale both by the Canadian and the United States Governments. Between 1872 and 1882 the United States Fish Commission hatched and distributed 200,000,000 young shad. In 1882, 62,000,000 whitefish and 4,000,000 California salmon were hatched, besides considerable numbers of carp, herring, cod, bass, and other kinds of fish.

Fisher, Mr. William Hayes, M.P., was b. 1853. Educated at Haileybury and Univ. Coll., Oxford. Called to the bar at the Inner Temple (1879). Returned in the Conservative interest as member for Fulham (1885).

Fisherwick, Baron. See DONEGALL, REV. E.

Fishmongers, The Worshipful Company of. See CITY GUILDS, THE.

Fisk University, Nashville, Tenn., U.S.A., the leading institution of the great South-West for coloured people. The work of establishing it was begun in October 1865, and the school was given its name in honour of General Fisk, of St. Louis, who was then in command of Nashville, as Commissioner of the Freedman's Bureau. The University has one of the most commanding sites about Nashville, and covers about twenty-five acres. In Victoria Square, so called in acknowledgment of the kindness shown to the Jubilee Singers by the British people, stands Jubilee Hall, which was erected and furnished at a cost of over £30,000 with funds raised by the Jubilee Singers. These singers were trained whilst pursuing their regular studies in the University; and the idea

was first conceived of raising money for a permanent establishment of Fisk University a little company of its students going into the North to sing the songs of their race, which came into being during the days of their slavery and then existed only in the memories and hearts of the people. In addition to repeated tours throughout the Northern States, the Jubilee Singers have thrice visited Great Britain (first visit 1884-5), and made tours through Holland, Germany, and Switzerland. Everywhere the songs touched the hearts of the people, and called forth the deepest sympathy for the cause of education among the people for whom they were labouring. Among their most popular songs are—"Steal away to Jesus," "I have been Redeemed," "Bright Sparkles in the Churchyard," "Go down, Moses," "I'm Rollin' through an Unfriendly World," "Turn back, Pharaoh's Army," "Gospel Train," etc. The Jubilee Singers have also founded the Livestone Missionary Hall, erected in Netherland Square, Nashville, which is designed as a monument to Dr. Livingstone, and symbolising the purpose of Fisk University in its relation to the civilisation and evangelisation of the "dark continent." Five students of the University are already labouring as missionaries on the west coast of Africa. It sends annually over one hundred students to teach during vacation, and it has supplied a large number of permanent teachers to Tennessee and the adjoining States. Tuition costs from £1 to \$11 a year; board and tuition \$12 a month. The work of raising an endowment fund has been begun; but for the present the support of professors and instructors is provided by voluntary contributions through the American Missionary Association.

"Fitzboodle, G." See NOMS DE PLUME.

Fitz-Gerald, John David Fitz-Gerald, P.C. 1st Baron (creat. 1882); b. 1815. Appointed Solicitor-General for Ireland (Feb. 1855) Attorney-General also for Ireland (April 1857 to March 1858); reappointed 1859; was M.P. for Ennis (1852-60).

Fitzgerald, Mr. Robert Uniacke Penrose M.P., of Cork Beg Island, Whitegate, co. Cork, was b. 1839. Educated at Westminster School, and Trinity Hall, Cambridge. He is Deputy Lieutenant and J.P. for Cork county. Was for some time a Government member of the Cork Marine Board. Mr. Fitzgerald was elected (1885) Conservative member for Cambridge.

Fitzgerald, The Right Hon. Sir William Robert Seymour Vesey, G.C.S.I., former Governor of Bombay, d. June 20th, 1885. He was b. in 1818, and educated at Oriel Coll., Oxford, where he gained the Newdigate prize (1838). He was called to the bar at Lincoln's Inn (1841). In 1848 he was returned in the Conservative interest for Horsham, but was unsuccessful; he was again returned for the borough in 1852, and for the third time Feb. 1874, and sat till Nov. 1875, when he was appointed Chief Commissioner of Charities in England. He held the post of Under-Secretary of State for Foreign Affairs (March 1858 to June 1859), and was Governor of Bombay (June 1867 till March 1872).

Fitz-Harding, Francis William Fitz-Harding Berkeley, and Baron (creat. 1861); b. 1826; succeeded his father 1867. Was M.P. for Cheltenham (May 1856 to July 1865).

Fitz-William, William Thomas Spencer Wentworth Fitz-William, K.G., 6th Earl (creat. 1716); b. 1815; succeeded his father in 1857 as 6th Earl (Irel.) and 4th Earl (Gt. Brit.). Was M.P. for Malton (1837-41, and April 1846 to July 1847); for Wicklow (July 1847 to Oct. 1857).

Fitzwygram, Lieut.-Gen. Sir Frederick William John, M.P., was b. 1823. Entered the 6th Dragoons (1843), and exchanged to the 15th Hussars (1860), of which regiment he was lieut.-colonel. Served with distinction. Retired on half-pay (1874) as Major-Gen.; Lieut.-Gen. (1883). Formerly Inspector-Gen. of Cavalry in Great Britain; commanded Cavalry Brigade at Aldershot (1879-84). Has the Crimean medal and clasp, and Turkish medal. Returned in the Conservative interest as member for South Hants (1884-85); re-elected 1885.

Fixed Stars. See ASTRONOMY.

"Flaneur." See NOMS DE PLUME.

Flats. See CO-OPERATIVE (APARTMENT) HOMES.

Flax. See TRADE OF 1885.

Fletcher, Mr. Banister, M.P., an architect and surveyor, is a Fellow of the Royal Institute of British Architects, and Dist. Surveyor for West Newington and part of Lambeth. Returned in the Liberal interest as member for North-West Wiltshire (1885).

Fletcher, Sir Henry, M.P., eldest son of the late Sir Henry Fletcher, was b. 1835. Educated at Eton. Late of the Grenadier Guards. Groom-in-waiting to Her Majesty (1885-86). Lieut.-col. 1st Sussex Rifle Volunteers. J.P. for Surrey and Sussex. Returned in the Conservative interest as member for Horsham (1880-85); Mid Sussex (1885).

Fletcher, The Worshipful Company of. See CITY GUILDS, THE.

Floating Grog Shops. See COOPERING AT SEA.

Flotsam, Jetsam, and Ligan. These terms are defined by Stephen in his "Commentaries," (vol. ii, p. 545), as follows: "**Flotsam** is where goods are cast into the sea, and there continue swimming on the surface of the waves; **jetsam** is where they sink and remain under water; **ligan** is where they are sunk in the sea, but tied to a cork or buoy, in order to be found again. When found, such goods may be returned to the owner if he appear; if he do not, they are the property of the Crown.

Flower, Mr. Cyril, M.P., of Aston Clinton House, Tring, Bucks, was b. 1843. Educated at Harrow, and Trinity College, Cambridge. Called to the bar at the Inner Temple (1870). Mr. Flower sat as Liberal member for Brecon (1880-85); elected to the present parliament for South Bedfordshire (1885); re-elected Feb. 1886. He married (1878), the eldest daughter of the late Sir Anthony de Rothschild. He is a Deputy-Lieutenant for London, and also a Lieutenant in the Royal Bucks Yeomanry. Mr. Flower is a Junior Lord of the Treasury (1886).

Flower Sermon, The. This annual sermon, preached at St. Katharine Cree, Leadenhall St., E.C., by the rector, Rev. W. M. Whittemore, D.D., was instituted by him in 1853. The discourse is founded upon some floral subject, in harmony with the occasion. Flower sermons are now almost universally preached in churches

of all denominations in town and country, the bouquets brought by the worshippers being usually sent to the London and local hospitals for the gratification and benefit of their inmates.

"Flying Roll, The." See JEZERELITES.

Flynn, Mr. James C., M.P., was b. 1852. He has been prominently connected with the Cork Literary Society. Formerly Secretary of the Cork Evicted Tenants' Fund. During the last two years he has been engaged in establishing branches of the National League. Returned as a Nationalist for North Cork (1885).

Foley, Henry Thomas Foley, 5th Baron (creat. 1776); b. 1850; succeeded his father 1869.

Foley, Mr. P. J., M.P. Managing Director of the Pearl Life Assurance Co. Returned as a Nationalist for Connemara Division of Galway (1885).

Follambe, Mr. Cecil George Savile, M.P., of Cockglode, Ollerton, Notts, was b. 1846. Educated at Eton. Entered the navy (1860); lieutenant (1867). Was favourably mentioned in despatches during the New Zealand war of 1863-4. J.P. for the North and East Ridings of Yorkshire and for Notts. Deputy Lieutenant for the East Riding of Yorkshire and for Notts. Returned in the Liberal interest as member for North Notts (1880-85); Mansfield Division (1885).

Folkestone, Viscount, M.P., P.C., eldest son of the Earl of Radnor, was b. 1841. Educated at Harrow and Trin. Coll., Cambridge. Was a lieutenant in Berkshire Militia (1870-72); is captain Wilts Yeomanry Cavalry. He is Deputy Lieutenant and J.P. for Wiltshire, Berkshire, and Peterborough. Appointed Treasurer of the Household (1885). Returned in the Conservative interest as member for South Wilts (1874-85); Middlesex, Enfield Division (1885).

Folk Land. See LAND QUESTION.

Folk Lore—originally the lore (learning) of the "folk" or people, i.e. the natural or uncultured classes of mankind as opposed to the cultured (later literary) classes—is a science the ultimate object of which is the investigation of the primitive mind of man in its various phases towards God and nature. It is thus the handmaid of comparative mythology, and bears directly on psychology and anthropology. Its methods are to collect, collate, and classify all surviving relics of primitive beliefs and superstitions, and to extract the essential and original elements from popular customs, usages, festivals, and games; proverbs, enigmas, saws, and jests; recipes, astrological and weather prophesying; and folk tales and songs. The scope of folk lore is frequently enlarged to include also witchcraft, religious symbolism, and similar subjects; but it is better to restrict the term to traditional lore, and to leave the remainder to the comparative mythologist. The word was first coined by Mr. W. J. Thoms (d. 1885), though on the Continent the term *Volkkunde* has been the name of an accepted science since Grimm first wrote, at the commencement of this century. In 1878 a **Folk Lore Society** was established by Mr. Thoms, and it has since published several important collections of folk-tales, etc., and regularly issues a periodical. A Folk-tale sub-committee is now engaged on the tabulation of materials, and on its completion some interesting comparisons will probably be achieved.

Football Matches, Oxford and Cambridge.

Year.	Winner.	Won by
1873	Drawn .	Each side gained 1 try.
1874	Drawn .	Neither side scored.
1875	Oxford .	1 try to nil.
1876	Camb. .	1 goal and 2 tries to nil.
1877	Oxford .	2 tries to nil.
1878	Drawn .	Neither side scored.
1879	Camb. .	2 goals to 1.
1880	Drawn .	Each side scored 1 try.
1881	Oxford .	2 goals to 1.
1882	Oxford .	1 try to nil.
1883	Oxford .	3 goals and 4 tries to 1 goal.
1884	Oxford .	3 goals and 1 try to 1 try.
1885	Camb. .	2 tries to nil.

Oxford has thus won 6 times, Cambridge 3 times, and 4 games have been drawn.

Forbach. See FRANCE.

Forbes, Horace Courtenay Forbes, 10th Baron (creat. 1424); b. 1829; succeeded his father 1868; elected a representative peer for Scotland (1874). This barony is the first on the Union roll, and its possessor, therefore, takes rank as Premier Baron of Scotland.

Fordred, Mr. John. See TORREFIED BARLEY.

Foreign Office. See CIVIL SERVICE.

Forest Departments (India). See FORESTRY.

Forester, Cecil Weld George Forester, 3rd Baron (creat. 1821); b. 1807; succeeded his brother 1874. Was M.P. for Wenlock from 1828 till his succession to the peerage.

Foresters, Ancient Order of. See FRIENDLY SOCIETIES.

Forestry. In course of the last fifty years there has been a very considerable decrease in the area of land under wood in Europe, North America, the West Indies, at the Cape, and in parts of Asia; and much attention has been given to the subject of forestry, not only from the point of view of the proper cultivation and conservation of trees, and the prevention of reckless destruction and waste, but in connection with the well known effect produced upon climate by the wholesale denudation of a country of trees; the sterile conditions of the western Sahara, for example, having been attributed to the removal of the forests which formerly existed there. As long ago as 1851, a committee of the British Association, appointed to consider the probable effects, in an economical and physical point of view, of the destruction of tropical forests, presented a report, in which it was urged that special attention should be given to the preservation and maintenance of the forests occupying tracts unsuited for other culture, whether by reason of altitude or peculiarities of physical structure; that in a country to which the maintenance of its water supply is of extreme importance, the indiscriminate clearing of forests around the localities whence those supplies are to be derived is greatly to be deprecated; that it is a duty to prevent the excessive waste of wood, the timbers useful for building and manufactures being reservee and husbanded; and that as much local ignorance prevails as to the number and nature of valu-

able forest products, measures should be taken to supply through the officers in charge information calculated to diminish such ignorance. In recent years the subject has come rapidly to the front, its importance to this country being, it is maintained, very great, on account not only of our large imports, and of the diminution of many areas of supply, but of the existence in the British possessions of some 340,000,000 acres of timbered land. The total amount of timber standing in England itself is comparatively small, being only 1,466,038 acres, as compared with 22,000,000 acres in France, the same extent in Hungary, and 23,000,000 acres in Austria. Scotland has 750,000, and Ireland 350,000 acres; and with a steadily increasing annual demand for timber the amount in England, Wales and Ireland is rapidly diminishing. Although the subject has only been brought prominently forward in England during the last few years, it has received much attention in India since 1846. There was an absence of systematic management of the Indian forests until that year, when an organised department was established in Bombay, followed in subsequent years by forest departments for other parts of India; and since they have been placed under management, there has been a very large increase in the gross and net revenue of the forests, and a still larger increase in their capital value by conservation. About 48,000 square miles of forest are now under government, there being also a very large area only partially under care. For some years the forest officers of the Indian Department were trained at the *École Forestière* at Nancy, but in future forestry is to be taught at *Cooper's Hill* as much as possible, with the aid of practical instruction derived from the neighbouring woodlands, such as *Windsor Forest*; and at the end of the first year's course students are to take a six weeks' course of practical instruction with the school at Nancy, and another town at the end of their second year's course, before proceeding to India. In June 1886 an examination is to be held, when not less than five probationers, if so many be found duly qualified, will be selected to undergo this special training, to qualify them for admission into the *Forest Service of India*. The subject of forestry as regards our home woodlands was brought under the notice of the House of Commons on May 15th, 1885; when Sir John Lubbock moved the appointment of a select committee to consider whether, by the establishment of a forest school or otherwise our woodlands could be rendered more remunerative; and from the speech of the hon. baronet it appeared that England is almost the only country without a forest school, there being such institutions in Prussia, Saxony, Hanover, France, Switzerland, Austria, Sweden, Spain, Russia, and in fact in almost every other country. He maintained that our interests in this respect were larger than those of any other country in the world. Very high authorities were of opinion that we were behind other countries in the management of our woodlands. Thirty years ago the Landes was one of the poorest and most wretched regions in France; it had been judiciously planted, and was now one of the most prosperous, the increase of value being estimated at no less than £40,000,000. To show the demand for timber, he mentioned that our annual import was about £16,000,000. Dr. Lyons, who had some years before called

attention to the subject in connection with Ireland, seconded the motion, and stated that in reports which had been issued relating to the greater part of Europe, it was clearly laid down that those countries could no longer afford to export an unlimited amount of timber to this country. It was the same with regard to the **United States**, and to **Canada**, where the timber had been recklessly cut down, and where constant forest fires destroyed as much timber as would have supplied European demands for some years. Including all forest produce, as well as timber, he thought the value of our annual import was about £30,000,000. The amount of woodland in **Ireland** was decreasing, and was far below the amount the country should possess. Mr. Gladstone agreed to the appointment of the committee, but did not wish to be bound to the establishment of any forestry school. There was, he considered, plenty of room for improvement in the management of woods in this country. The motion being agreed to, the Committee was duly nominated, met under the presidency of Sir J. Lubbock, and took evidence, and reported in favour of its reappointment in the session of 1886. The witnesses examined included Mr. Padder, head of the Revenue Department of the India Office, who has the management of the Forest Department, Dr. H. Cleghorn, who took an active part in the formation of the Indian Forest Department, Col. Michael, C.S.I., and Mr. Thistleton Dyer, Assistant Director of the Royal Gardens, Kew; and the evidence went to show the need of a school of forestry in England, and the improvement that would probably follow as regards forests in the United Kingdom if placed under specially educated management. It was stated by several witnesses, that from one-fourth to one-fifth of any country should be under forest, and that extensive areas in the United Kingdom are suitable for planting.

Forestry Examination, 1886. See FORESTRY.

Forfeiture of Property for Crime applied to (1) **Treason** and (2) **Felony** of any kind. (1) By the original Act of King Alfred, a **Traitor** was "liable in his life and in all that he has." It applied to all property and agreements for property back to the date of the treason, but did not affect a wife's settlement, though her dower was forfeited by 5 and 6 Edward VI. If a rebel, however, was killed in battle, or died before a trial, his lands were not forfeited. Scotland was exempt from the law until the Union, when it was made to apply to both countries equally. The Act continued in force until 1870, when it was abolished. (2) A **Felon** forfeited to the Crown all his goods and chattels and the profits (only) arising from his freeholds during his life; after his death the King had the profits of his freeholds for a year and a day; but this Act was repealed by 54 George III. for all felonies except treason and murder. The **Felony Act of 1870** abolished all forfeiture for both attainder and felony.

"**Forrest, George.**" See NOMS DE PLUME.

"**Forrester, Frank.**" See NOMS DE PLUME.

Forster, Bishop. See OLD CATHOLICS.

Forster, Sir Charles, Bart., M.P., was b. 1815. Educated at Worcester Coll., Oxford. Called to the bar at the Inner Temple (1843). He is Deputy Lieutenant and J.P. for the county of Stafford. Created a Baronet (1874). Returned

in the Liberal interest as member for Walsall (1852-85); re-elected 1885.

Forster, Mr. T. Barham, C.E. See ENGINEERING.

Forster, Rt. Hon. W. E., M.P., P.C., D.C.L., LL.D., was b. 1818. Is J.P. and Deputy Lieutenant for West Riding of Yorkshire and Westmoreland. Has held the following official appointments:—Under-Secretary of State for the Colonies (1865-66); Vice-President of the Committee of Council on Education (1868-74), with which Department his name is closely identified by the Education Act of 1874; Chief Secretary for Ireland (resigning the office in consequence of a divergence of view with his colleagues on the government of Ireland) and Keeper of the Privy Seal (1880-82). Mr. Forster has always been distinguished for his independent action as a politician. Returned in the Liberal interest as member for Bradford (1861-85); re-elected for Central Bradford 1885. Has held the office of Lord Rector of Aberdeen University (1868), and was presented with the freedom of the city of Edinburgh (1875). Mr. Forster married (1850) a daughter of the late Dr. Arnold of Rugby.

Fortescue, Hugh Fortescue, 3rd Earl (creat. 1789); b. 1818; succeeded his father in the earldom 1861. Was a Lord of the Treasury (July 1846 to Dec. 1847); was for some years Secretary of the Poor Law Board (resigned Feb. 1851); was M.P. for Plymouth (July 1841 to July 1852); sat for Marylebone (Dec. 1854 to Feb. 1859).

Fourth Bridge. See ENGINEERING.

"**Fortnightly Review**" (2s. 6d.), so named from its having at first been issued twice a month. Founded 1865. First editor Mr. J. H. Lewes, succeeded by Mr. John Morley, M.P. (1867-82); present editor Mr. J. E. S. Scott (Oct. 1882). Originally a philosophical Radical review. It has now assumed a wider scope, discussing social and political questions on a broad basis, and giving occasional reviews of the leading books.

Fort William. See BEN NEVIS OBSERVATORY.

Forwood, Mr. Arthur Bower, M.P., The Priory, Greatcare, was b. 1836. Educated at Liverpool Coll. Is J.P. for Liverpool; Mayor (1877-78). President of the Liverpool Constitutional Assoc. Returned in the Conservative interest as member for Ormskirk Division, South-West Lancashire (1885).

Foster, Mr. Balthazar Walter, M.D., M.P., was b. 1840, at Cambridge. He is President of the council of the British Medical Association, Professor of Medicine in Queen's College, Birmingham, and F.R.C.P. (Lond.). Dr. Foster, is a J.P. for the county of Warwick, and a town councillor of Birmingham. He was returned in the Liberal interest for Chester (1885).

Foster's Patent. See FIRE EXTINCTION.

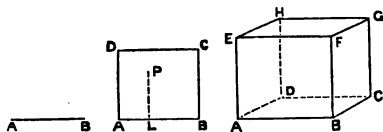
Founders, The Worshipful Company of. See CITY GUILDS, THE.

Fourier. See CO-OPERATIVE (APARTMENT) HOMES.

Fourth. See SCALE (MUSIC).

Fourth Dimension. The speculations on the subject of higher dimensions of space were introduced in 1820 by Lobatschewski in the discussion of the truth of the axioms of geometry. He investigated the modifications which would be introduced into Euclidean geometry if it were assumed that parallel straight lines would meet

if produced far enough, the distance of their point of meeting depending on their distance from one another. He was led to assume the existence of a curvature in space. Considered from this point of view, however, the subject presents mathematical difficulties. The following considerations will be found to make the theory of higher dimensions of space perfectly intelligible:



of which is a plane area. If we go on in this series, and try to move the cube as each of the preceding products has been moved, we come to a difficulty. The cube on moving in any known direction only makes a larger solid figure; it does not produce anything new, as was produced in the preceding cases. In them the new direction of motion was at right angles to every direction which had been used before. But we cannot in our space find a direction which is at right angles to all the three directions in a cube. As far as this there can be no difference of opinion. But here views diverge. Somelay it down that space is known, and that the questions about there being another direction possible besides those we know are merely fanciful analogies drawn from numbers. Space is a reality; it happens that positions in space can be denoted by using three independent numbers, but that is no reason to conclude that there is a kind of space position in which is denoted by using four independent numbers. Other investigators make the hypothesis that there is another dimension, but that we are unable to discover it because of our limitations. We are, they say, like beings confined to a plane, who by the conditions of their life cannot understand what is up and down. We, having no experience of this fourth direction of motion, look upon it as inconceivable. But, they say, it is possible to overstep the limitations of our experience, and just as a being confined to a plane might learn a good deal about a cube, so we can learn a good deal about the figure corresponding to a cube in four dimensions, and become familiar with the properties of bodies in this higher space. As an instance of this the properties of the body which a cube makes on moving off in the fourth dimension can be discussed. Imagine a cube starting in the position $AB C D E F G H$ to move off in a direction at right angles to every one of the three directions we know. It instantly disappears out of our space, as a square would disappear out of a plane if it were to move at right angles to the plane. The cube forms a new product of which the sections are cubes. Every particle in the cube moves off in this new direction, and no particle is in front or behind another with regard to this motion. The whole cube is to the new body as a square is to the cube. There is the initial and the final position of the cube, and each of the squares of the cube traces out a cube. Thus there are eight cubes bounding this new figure. Each of the lines of the cube traces out a plane, and there are six initial and six final planes, or twenty-four planes altogether. Each point traces out a line, and there are twelve initial and twelve final lines, or thirty-six lines altogether. Lastly, there are sixteen points.—On the supposition of a fourth dimension our space is the section of an ampler space. And just as surfaces in space possess curvature, so our space itself may be conceived as curved. Thus, proceeding in a line as straight as we can possibly measure, we might after having travelled a very great distance find ourselves again at the point whence we started. This would correspond to the case of a being on the surface of a sphere whose sole efforts were confined to keeping the line he was travelling on from bending to left or right. Such a being would travel right round the sphere and come back to his former position.—The fourth dimension has been used as an explanation for certain

Imagine the straight line AB to be traced out by the motion of a point which starts at A and terminates at B . It moves in one direction, traces out a line, and gives two points A and B , which we may call the initial and the final points. Let a straight line generate the square $AB C D$ by moving at right angles to the direction of the motion of the point. Let it start at A and terminate in D . It traces out an area. There is one area—namely, $AB C D$. There are four lines, for there is the initial line AB and the final one DC , and besides this each of the points has moved and traced out a line: A has traced out AD , B has traced out BC . Finally there are four points. In the square $AB C D$ it is possible to pass from any point to any other point by moving in two directions, or in combinations of two directions. For instance, to get to P from A , the movement would be first from A to L in the direction AB , then from L to P in the direction at right angles to AB . It is evident that any point in the plane in which $AB C D$ lies can be reached by movements of sufficient magnitude in these two directions. But it is not possible to reach a point above or below the plane, unless with the aid of a movement in a direction at right angles to both of those already used. It is possible to conceive a being whose consciousness is absolutely confined to the plane of the square $AB C D$. Such a being would not know anything about up and down; the only objects he would know would be the figures on the plane. There would be to him no way of going out of the square except by going through one of the sides. A figure which was taken up from or put down on the plane would seem to disappear suddenly or to come as suddenly into existence. If a square moves in a direction at right angles to the two already used it traces out a cube. There is a new result—a solid. Suppose a square to move from $AB C D$ to $E F G H$. There is one solid formed. Each of the lines in $AB C D$ traces out a square; there is also the initial square $AB C D$ and the final square $E F G H$, making six squares altogether, which are the six bounding sides of the cube. Each of the points in $AB C D$ traces out a line, and there are the four initial and the four final lines, giving twelve lines altogether. There are also eight points.—In the generation of each figure something new is produced. The point produces a line, which is quite different from a point; the line traces out a plane area, which is not any multitude of lines put together; the plane area when moved does not make a larger plane area, but a new product, which contains an infinite number of sections, each

alleged marvels of spiritualism. The analogies of the relations between plane and spatial existence will serve to indicate the possibilities of four-dimensional beings. A square, to a being on a plane, is perfectly enclosed on every side. But a space-being can put an object inside the square without going through any of the sides. In the same way a closed box is in our space enclosed on every known side. But a four-dimensional being could introduce an object into the box without passing through any of the sides. To him a box is as open in the fourth dimension as a square is open to us in the third. This problem has been much discussed of late—see "Flat-land" (Seeley, 1884, 5s.—said to be written by Dr. E. A. Abbott), and a good concise brochure "What is the Fourth Dimension?" by C. H. Hinton (Sonnenschein, 1885, 1s.).

Fourth Party. See **POLITICAL PARTIES (ENGLISH).**

Fowler, Mr. Henry Hartley, M.P., was b. 1830. He became a solicitor (1852). Mayor of Wolverhampton (1863). Appointed Under-Secretary for the Home Department (1884). Member of the Council of the Wolverhampton Chamber of Commerce. He is a Deputy Lieutenant for the county of Stafford and J.P. for the borough of Wolverhampton. Returned in the Liberal interest as member for Wolverhampton (1880); re-elected for East Wolverhampton (1885). Holds office in the present administration, as Financial Secretary to the Treasury (1886).

Fowler, Sir John. See **ENGINEERING.**

Fowler, Sir Robert Nicholas, Bart., M.P., b. 1828, son of Mr. J. Fowler, banker, of Bruce Green, Tottenham. Graduated B.A., with high honours at the University of London, in 1850. Became partner in the banking firm of Dimsdale, Fowler, Barnard, & Co. Some years ago was nominated a member of the senate of the London University. Entered parliament for Penryn (1868-74), and (1880) was returned in the Conservative interest for the City of London; re-elected 1885. Alderman (1878), served as Sheriff (1880), Lord Mayor (1883), being re-elected (1885) on the death of Lord Mayor Nottage. He made a tour round the world in 1875-6, visiting India, China, and Japan, and published a journal of his tour. Sir N. Fowler is J.P. for Middlesex and Wilts, and Commissioner of Lieutenancy for London; also a Chevalier of the Order of Leopold of Belgium.

Fox, Mr. C. Douglas. See **ENGINEERING (MERSEY TUNNEL).**

Fox, Dr. Joseph F., M.P., M.A., was b. 1853. Educated at Queen's Coll., Cork. He was for some years engaged in the scholastic and medical professions in America. Returned as a Nationalist for Tullamore Division of King's County (1885).

Fox, Mr. J. See **ENGINEERING (MERSEY TUNNEL).**

Foxford, Baron. See **LIMERICK.**

Framework Knitters, The Worshipful Company of. See **CITY GUILDS, THE.**

France. A republic governed by a President and National Assembly under constitution of 1871, revised in 1875 and 1884. The legislative power resides in the Assembly, sitting in two houses: viz., the Senate of 300 members, elected by delegates of municipalities; and the Chamber of Deputies of 557 members, elected by universal suffrage. The initiative in legislation is exercised by the President or either house. Execu-

tive power is confided to a president, elected by the two houses united in National Assembly. War can be declared by the President only with consent of the two houses. All religions are on a legal equality; every sect being entitled to a grant from the State if its numbers exceed 100,000.—Area is 204,177 square miles; the population 37,670,000. Revenue in 1885 about £134,200,000; expenditure £135,416,000; national debt £786,117,000. Army in peace about half a million, in war 2½ millions. Navy 46 armour-clad and 335 other vessels. The colonies include Algeria, Cochinchina, Senegambia (including the territory of that name and other colonies and protected states on the west coast of Africa), Réunion, Pondicherry, etc., in India, Martinique and Guadeloupe, in West Indies. These colonies are politically part of France, and are represented in the National Assembly. Protected states: Tunis, Anam, Tonquin.—In 1870 Napoleon III. declared war against Prussia on the refusal of the King to give an assurance not to support any further claim of a member of the house of Hohenzollern to the Spanish crown; and late in July the French army occupied Saarbrück; on August 3rd their advance was surprised and defeated at Weissenburg; on the 6th their right and left wings at Wörth, Spicheren, and Forbach; on the 14th August beaten at Courcelles, on the 16th at Mars-la-Tour, on the 18th at St. Privat and Gravelotte; and the greater portion, under Bazaine, besieged in Metz—the remainder, under the Emperor, retreating to Châlons. Being reinforced, he attempted to relieve Metz, but was surrounded at Sedan, and forced to surrender on Sept. 1st. On the 4th the Republic was proclaimed at Paris, and a provisional government, including MM. Thiers, Faure, Simon and Gambetta, with Gen. Trochu as military commander, was constituted. On Sept. 19th the siege of Paris commenced. Gambetta escaped in a balloon, and organised the Government of National Defence at Tours, by which immense efforts were made to raise the siege, for a time with some success, General De Paladine having recaptured Orleans from the Germans. These latter, aided by the troops set free on the surrender of Metz, soon recovered this advantage, and drove the French beyond the Loire, taking Rouen, Tours, and Le Mans. Garibaldi, who had raised a corps of volunteers in support of the Republic, was checked, and Gen. Bourbaki, who had moved into the Franche Comté to menace the enemy's communications, was defeated and driven across the Swiss frontier near Pontarlier in January. Further resistance being hopeless, Paris, on January 28th, 1871, surrendered, and the forts were occupied on February 8th. A national assembly was convened at Bordeaux to ratify a treaty of peace, by which the greater part of Alsace and Lorraine was ceded to Germany, and an indemnity of £200,000,000 agreed to be paid, certain territories and Paris forts being occupied pending the execution of its articles. The Assembly then adjourned to Versailles, and on March 18th appointed Thiers chief of the executive. The Paris National Guard, composed chiefly of artisans (the provincial levies having gone home, and the regular troops taken prisoners at Metz, Sedan, etc., not having yet returned), revolted, March 18th, seized the artillery, killed Generals Thomas and Lecointe, and proclaimed (March 28th) the Commune (q.v.) Sufficient regular troops having been collected, Paris was again besieged on April 2nd,

and finally taken on May 21st, after seven days' hard fighting, during which the Tuileries and at least a quarter of the city was destroyed. Early in 1872 a combination of the Legitimist, Orleanist and Bonapartist parties caused Thiers to resign; and there is little doubt that the Comte de Chambord might have obtained the crown, but for his refusal to adopt the tricolor. Thiers resumed the government, and devoted himself to the payment of the indemnity and procuring the evacuation of the provinces. In January, 1873 Napoleon III. died at Chiselhurst (where he was buried). In April, the payment of the indemnity being assured, the monarchist coalition drove out Thiers and elected Marshal M^cMahon. In 1875 a new constitution was voted, and M^cMahon re-elected president for seven years. During his government attempts were made at one time (by a fusion between the Legitimists and Orleanists) to restore the Bourbons, and at another the Bonapartes, but against the strong will of the nation they proved fruitless. In September 1877 Thiers died. In November a Republican majority in the Chamber was returned and the Dufaure ministry installed. In 1879 the Senate was by new elections brought into harmony with the Lower House. A partial amnesty was decreed, as well as a reform in the public service, in consequence of which many of the leading public functionaries of monarchist tendencies were dismissed and their places filled by Republicans. Respecting the proposed changes in the military commands the President came into conflict with the Ministry, and on January 30th resigned. Next day M. Grévy was elected President of the Republic. The Dufaure ministry was replaced by the Waddington cabinet. The ex-Prince-Imperial was killed in the Zulu war in May. In November the Assembly met in Paris for the first time since the civil war. On December 26th M. Waddington resigned in favour of M. de Freycinet (the influence of the Left Centre, previously predominant, being modified in the direction of the Left). The budget of this year very favourable.—In 1880 further dismissals of public functionaries not of republican opinions took place. In March decrees were published expelling the Jesuits, and ordering all religious bodies to declare their property, rules, etc., and apply for state authority to worship. General amnesty was voted (July 9th). The premier having given a private assurance that the above decrees should not be enforced, resigned, and was succeeded by the Ferry cabinet, who enforced them. The Jesuits had already dispersed before the resignation of De Freycinet, and 261 establishments of other orders were broken up. On December 10th the Chamber enacted that the education of girls in secondary schools should be undertaken jointly by the municipalities and the state. The financial statement highly satisfactory.—1881. Insurrection in Oran under Bon Amaina, the marabout, suppressed in February. In Tunis, where the French had established a postal and telegraphic service, the coasting trade, the Goletta railway, etc., being worked by the Italians, to the detriment of French undertakings, aroused much ill-feeling between the two nations. In April Tunis was occupied, ostensibly for the repression of aggressions of Kroumir tribe, and protectorate established. Holy war preached. Sfax bombarded July 8th. In October the Holy City of Kairawan taken and insurrection repressed. In March, April and May bills making primary education both

compulsory and gratuitous, extending the laws as to children's labour to convents, etc., compelling teachers without exception to hold diplomas of universities, etc., regulating right of public meeting, and revising the tariff and press laws, were passed. The *Scrutin de liste* bill was negatived; the elections gave an increased republican majority, and on May 13th the ministry resigned in favour of the Gambetta cabinet.—1882. Large republican gains on senatorial elections in January. Gambetta's scheme for revision of constitution in effect defeated, and De Freycinet succeeded to ministry. In Egypt an insurrection of the army headed by Arabi Pasha forced the Khedive's ministers to repudiate European control. The English and French fleets appeared before Alexandria. A demand for the banishment of Arabi and resignation of the ministry refused. A riot, in which 70 Europeans were killed, followed. A European conference met, but declined to allow the Turks to interfere or to designate the power who should guard the Suez Canal. The Chamber, fearing to be dragged into another Tunisian affair, and declining to vote expenses for the joint protection of the Canal, the De Freycinet ministry resigned, July 29th. The joint control was abolished, England undertaking the protection of the Canal, etc. The Du Clerc ministry was then installed. In November a treaty was made by M. De Brazza with a chief on the Congo, ratified, and colony established. On December 24th the Chamber resolved to send expedition to Anam to enforce protectorate of Tonquin by treaty of 1874, China disputing the claim, as infringing her previous right to tribute from Anam. On December 31st Gambetta died.—1883. Jerome Napoleon arrested for issuing manifesto claiming the throne, but released February 9th. A bill for expulsion from France of members of former reigning families being rejected by Senate, the ministry was replaced by the Ferry cabinet. The Orleans princes were removed from military commands. Comte de Chambord died August 15th. Convention with Tunis granting administrative judicial and financial reforms ratified, May 31st. Admiral Pierre appeared before Tamatave in Madagascar, claiming protectorate and an indemnity; on receiving an answer in the negative he bombarded and captured the town. Mr. Shaw, an English missionary, was arrested, but subsequently released and suitably indemnified. A desultory warfare with Hovas continued to be waged. Early in the year Com. Rivière, who had seized Hanoi on May 24th, being cut off and killed by Black Flags, fresh troops were dispatched, who occupied Sontay and other towns in Red River delta.—1884. Municipal elections not favourable to Government. Royalists established a propaganda, and gained ground. Army bill imposing universal compulsory service established. National Assembly met for revision of constitution: right of Senate to vote budget abolished—members of former reigning families declared ineligible for Presidency—life members of Senate abolished, the rights of existing senators being preserved; changes in detail of senatorial elections. Divorce re-introduced: heretofore marriage indissoluble. The French in Tonquin marched in pursuit of Black Flags, etc., in March, towards Chinese frontier. Defeated in June at Langson, and driven back to delta. Hostilities continued against China, although no declaration of war was published, in order that the fleet might avail

itself of neutral coaling stations, etc. Foo Chow arsenal destroyed August 23rd, and Min-jan forts 26th. Landing in Formosa and seizure of coal mines. In Tunis consular jurisdictions suppressed and French tribunal substituted.—1885. The death of the great novelist and dramatist Victor Hugo (*q.v.*) took place in May. The fall of the Ferry or Opportunist ministry occurred in June, upon the question of the conduct of the war in Tonquin. They were succeeded by a cabinet of which Brissou and De Freycinet (*q.v.*) were the principal members. Peace was concluded between France and China; a treaty with Anam, by which Tonquin should pass under French control, French commerce should be exclusively favoured and concession of a new trunk railway granted, and continuance of the connection between Church and State, being the principal points of their policy. The Left, under Clemenceau, advocated, on the contrary, the abandonment of aggressive colonial policy, the absolute sovereignty of universal suffrage, financial reform, the separation of Church and State, etc. The elections took place in October, and resulted in a large increase in the Monarchist party, which now numbers nearly two hundred votes in the Chamber. The war in Anam and Tonquin continued with various success. The monetary convention of the Latin states was renewed on November 6th, Belgium dissenting on the question of the repayment of silver in event of dissolution. In Madagascar a desultory war of posts went on. In September the French unsuccessfully attacked the Hovas near Tamatave. About December 20th, however, it was announced in the Chamber that a treaty of peace had been effected—the Hovas agreeing to accept a Resident at the capital, and to pay an indemnity, their internal government not to be interfered with. On December 16th, the report on the Tonquin credits, recommending that the troops be withdrawn, was presented, but after several days' debate the credits were finally voted by a majority of four. On the 29th the Brissou ministry resigned, their majority being too small to insure the stability of the cabinet. M. Grévy was on Dec. 28th re-elected President of the Republic by 457 out of 589 votes (M. Brissou obtaining 68, M. de Freycinet 14, and M. de la Foye 10 votes). M. de Freycinet has succeeded in forming a ministry. M. Clemenceau, although not included therein, will probably give it his independent support.—1886, Jan. 12. Statement of receipts and expenditure for 1885 published, which showed a diminution in the amount both of exports and imports. M. Paul Bert appointed Resident-General in Tonquin, January 13th. The President on the 14th granted free pardon to all persons under punishment for political offences committed since 1870, amongst whom were Prince Kraptokin (*q.v.*) and Louise Michel (*q.v.*). By recent elections the Right is reduced from 202 to 184 members. The Republicans, having gained the difference, are now 400 strong. A bill was introduced, February 18th, to give the President power to expel any member of the dynastic ruling family, and referred to committee for report. The Duché bill on the proposed expulsion of members of former reigning families was thrown out, and the Revit bill passed in committee, but was subsequently defeated in the Chamber (March 4th), and the matter was left to the discretion of President.

M. Pasteur's discoveries on the successful treatment of hydrophobia attracted great attention. Treaty with Madagascar ratified on March 6th. Loan to the amount of £600,000,000 to be issued, to clear off floating debt and outstanding Treasury bills. 15th. Debate on the Decazeville mining riots terminated, the Government undertaking to introduce a measure for improving mining legislation. 17th. Budget for 1887 presented to the Chamber by M. Sadi-Carnot. 20th. Paris Loan Bill adopted by the Chamber. 22nd. Chamber agreed to bill admitting the public to the sittings of the Paris Municipal Council. 25th. Duchesse de Chambord died at Gorz. The Budget Committee elected. 28th. Bill on Exhibition of 1889 laid before the Cabinet by M. Lockroy. 30th. Bill disqualifying monks or nuns from teaching in municipal schools passed by the Senate. Bill permitting the securing of civil funerals passed the Chamber. Budget Committee agreed to loan, but limited amount.

Francis Joseph I., Emperor of Austria, and King of Hungary and Bohemia, b. 1830. His father was the late Archduke Francis Charles (d. 1878). The present emperor succeeded his uncle, Ferdinand, on the throne when he abdicated (1849). The beginning of his reign was marked by important events. Hungary was in a state of rebellion, which was quelled by the help of Russia. His Italian dominions were saved by the genius of General Radetzky. The Emperor Francis Joseph made strenuous efforts to prevent the Crimean war, and refused to join France and England. After the Austro-French war (1859), he was compelled to sign the treaty of peace of Villafranca, by which Lombardy was ceded to Italy. In 1860 he lost the duchy of Holstein, obtained by the convention of Gastein, and in the same year also Venetia. That year was fatal to the supremacy of Austria in Germany, the contest being decided in favour of Prussia by the treaties of Nikolsburg and Prague respectively. The provinces of Bosnia and Herzegovina, which formerly belonged to Turkey, were, by decision of the Berlin Congress (1878), added to Austro-Hungary. In 1854 the Emperor Francis Joseph married the Princess Elizabeth Amalie Eugenie, daughter of the Duke Maximilian Joseph of Bavaria. The Emperor is using his best efforts to consolidate an empire made up of heterogeneous elements, and, so far (1886), he seems to have been tolerably successful.

Fraser, Major-General Charles Craufurd, M.P., V.C., C.B., was b. 1829. He entered the army (1847), was promoted to the rank of Major-general (1877), and took a prominent part in the Indian mutiny and Abyssinian war. Late Inspector-General of Cavalry. He gained the Victoria Cross for bravery in the Indian mutiny, was made C.B. for his services during the Abyssinian war, and received the Royal Humane Society's medal for services under fire. Returned in the Conservative interest as member for North Lambeth (1885).

Fraser-Mackintosh, Mr. Charles, M.P., F.S.A., was b. 1828. Formerly capt. Inverness-shire Rifle Volunteers. Returned in the Liberal interest as member for Inverness burghs (1874-85); re-elected 1885.

Frederick Charles, Prince (the "Red Prince"), eldest son of Prince Charles, the

second brother of the Emperor of Germany, b. March 20th, 1828, died at his castle of Glienicke, near Potsdam, June 15th, 1885. He adopted the military profession, and commanded in the war against Denmark in 1864. In 1866 he was placed at the head of the first army in the Austrian war, and in a series of actions he drove the Austrians to Sadowa, and won the great battle of Königgrätz. He was the author of some beneficial reforms in the German military system. In the Franco-German conflict he commanded the second German army corps, of 260,000 men and 500 guns. He drove Marshal Bazaine into Metz (August 16th, 1870), and closely invested the fortress, which capitulated October 27th. Prince Frederick Charles afterwards recaptured Orleans, and took Le Mans (Jan. 13th, 1871).

Frederick William of Prussia, Field-Marshal Prince Nicholas Charles. *Heir Presumptive* to the German throne; b. October 18th, 1831. He was made a Lieutenant-General in 1860, and attached to the staff of Marshal Wrangel in the time of the Danish war, in which he took an active part. In the war with Austria (1866) he commanded the army of the Oder, and in the Franco-Prussian war he led the third German army corps. With a superior army he beat that under Marshal MacMahon at Reichshofen; following up this success, he quickly overtook MacMahon at Sedan, inflicted another defeat upon him, and finally forced Napoleon III. to surrender with an army of 83,000 men. For this exploit Prince Frederick William was made a Field-Marshal. At the siege of Paris he held the left bank of the Seine until the city capitulated (Jan. 10th, 1871). Since the Franco-Prussian war he has been President of the Eastern Frontier Defence Committee. In 1878 he acted as Regent of the German Empire. In 1858 he married the Princess Victoria of England, the Queen's eldest daughter.

Frederick William Louis, Grand Duke of Baden; b. 1826. He succeeded his father, the Grand Duke Leopold, 1852. By right of succession the government of the duchy belonged to his brother Louis, who was older than himself; but Duke William had to assume the government, his brother being mentally incapacitated. As a ruler he has proved himself a firm ally of Prussia, and in the war of 1870-71 against France he fought side by side with Prussia, and took a prominent part in the struggle. In home politics he declared himself a stern opponent of the Jesuits, and in 1855 he put an end to their existence as an organised ecclesiastical community, by banishing them from the duchy. His wife is a daughter of the Emperor William of Germany.

Free Church of England. A Protestant episcopal organisation, originated in 1844 (enrolled in Chancery 1863) as a counteracting movement to the Oxford Revival. The first Free Church was built at Bridgetown, Devon, by the late Duke of Somerset. Being free from state control, the Free Church has liberty to enter a parish where ritualistic practices prevail, and establish a liturgical service on the basis of the Evangelical party in the National Church, with which section it is practically identical. It is governed by three bishops, duly consecrated in the line of the Canterbury succession by the Rt. Rev. Bishop Cummins, of the American Protestant Episcopal Church, whose bishops were consecrated at Lambeth Palace 1787. The churches, although not

numerous, are widely spread. Official organ *Free Church of England Reporter*. Convocation held yearly (June). Bishops: Revs. B. Price (Primus), Newman, H. O. Meyers. Hon. Sec. Rev. E. J. Boon, Worcester. Registrar: Mr. F. S. Merryweather, New Malden. Offices: 3, Westminster Chambers, S.W. **The Reformed Episcopal Church**, a secession from the Free Church, has a separate Convocation and Church organisation, and possesses a few churches.

Freedom of Speech in Parliament. See PRIVILEGES OF PEERS AND MEMBERS.

Freehold. Under the English feudal law the sovereign was ultimate landlord of all England. The subject had not the land, but an estate or interest in land approaching more or less nearly to absolute ownership. Of these estates three ranked highest: the fee simple estate, or estate to a man and his heirs; the estate tail or estate to a man and the heirs of his body—i.e., his direct descendants; and the estate for life, whose name explains its nature. The first-named estate is the nearest approach to absolute ownership of land known in our law; and even the last-named ranks above an estate for any specified term of years, even of 99 or 999 years. These estates are said to have derived their name of freehold from being thought the only estates worthy of a freeman. For under the feudal law a man's freedom and rank were both discriminated by the relation in which he stood to the land. The characteristics of an estate for life or an estate in tail are involved, and must be studied in legal treatises. Those characteristics of an estate in fee simple which separate it from absolute ownership are thus summed up in Mr. Williams' "Principles of the Law of Real Property." "A small occasional quit-rent (payable to the crown or lord of the manor), with its accompanying relief, suit of the court baron (of the manor) if any such exists, an oath of fealty never exacted, and a right of escheat seldom accruing." (See Kenelm Digby, "History of the Law of Real Property," Professor Pollock, "English Citizen Series.")

Freemasonry. While much has been said and written about Freemasonry, and while the broad principles of the craft are pretty generally understood, there is little but the name which is identical between Freemasonry of ancient times and Freemasonry as now practised. It would be unfair, perhaps, to say that the Order has degenerated, because modern Freemasonry has established works of practical charity which it is to be hoped will be as enduring monuments of the nobility of its lessons as the great buildings all over the world are temples to the usefulness and excellence of the Freemasonry of the early ages. But that Freemasonry has changed, no person who knows anything of it will be ready to deny. Like other great institutions—and among the institutions of the day it is one of the greatest—it has adapted itself to the requirements of the times, and instead of being a guild—a trade union, of operative, practical, working builders, who in their time very probably had funds to aid the necessitous of the Order, it has cast off the teaching of a handicraft, has devoted itself to morals and ethics, and has within a comparatively short period raised a superstructure which ought to be more durable than brass. But, considering the great antiquity of the Order, Freemasons have been very slow in making themselves

useful in regard to the wants of the present age of progress. In however crude a form they may have been established in the earliest days of the world, societies which kept the secrets of their trade to themselves unquestionably existed, and so they went on till as late as the last century, when the necessity for them as trade teachers ceased. If Freemasonry, as one of these societies, had not struck out for itself a new line about that time, and followed up the course directed by that new line within the last fifty years, it would probably have now sunk below the horizon. The existence of Freemasonry in England is traceable from a very early date, and the Church, which was the great possessor of learning, had something to do with it. Legendary lore ascribes the formation of the first lodge in Britain to St. Alban (A.D. 287), but the formation of lodges is not likely to have been very rapid at that period, as the necessity for large public works was not apparent. We hear but little of their progress during the first thousand years of the Christian era, though they must have been working at buildings whose ruins have since been discovered. A charter was granted to them by King Athelstan in 926, in which year a Grand Lodge was formed at York, under Prince Edwin. The granting of the charter by Athelstan was probably due to some suspicion with which Freemasons' lodges had been regarded, as the Masons appear on more than one occasion to have been looked upon as a secret body dangerous to the State. Athelstan, however, with the assistance of Prince Edwin, both as admitted members of the body, knowing the real nature of the guild, ratified and confirmed it with his approbation, and thereby removed any public fear of danger. Five hundred years later there was less liberality shown them, for their assemblies were prohibited by Parliament in 1425. Notwithstanding this, and in spite of it, they were not suppressed, for they worked under all adverse circumstances for 200 years more, when Inigo Jones was of great service to them, and constituted several lodges in 1607. Thenceforward, either the records of history have been more perfect than they were previously, or the encouragement of Freemasonry became greater. Certainly, "in all ages kings have not hesitated to lay aside the sceptre for the trowel," and going back to a very early date we find Royalty connected with it, for in 1358 Edward III. revised the Masons' Constitutions. In 1450 Henry VI. was initiated, and 240 years later William III. was honoured by being admitted as a true and lawful brother. We have referred to a new line which Masonry laid out for itself during the last century, and this is really the cause of the survival of the Order at the present time. That new line was charity, and this desideratum was recognised 160 years since by the formation of a committee of charity in connection with the Grand Lodge in 1725. Still, as before stated, Masons were slow in their work, and sixty-three years elapsed before they thought of doing anything for orphan and necessitous children. There may have been a reason for their apparent neglect. Perhaps there was a greater spirit of independence in those days than there is in ours, which rendered charity unnecessary. However, in 1786, Chevalier Ruspini, surgeon-dentist to George III., established the Freemasons' Girls' School, now known as The

Royal Masonic Institution for Girls, and a few years later The Boys' School was started. The Boys' School is not so old as the Girls', and The Institution for the Aged is the youngest of the three, the Institution for the Men not having been established till 1747, and for the Widows not till 1745. Thus English Masonry stands at the present time. It has first of all a fund called The Fund of Benevolence, to which every one initiated in a lodge under the English constitution contributes a sum on his initiation; and as long as he is a subscriber to a lodge in London 4s. a year is paid by his lodge for him to this fund, and 2s. if he subscribe to a country lodge. The Board of Benevolence assists cases of distress, and during the year just ended (1885) it did so to the extent of some £10,200; the Girls' School boards, clothes, and educates 240 girls, and the Boys' School 230 boys; while the Benevolent Institution grants annuities to about 350 persons: £40 a year to men, and £32 a year to widows. But all this great work is, as we have said, of very recent date. No extensive strides have been made in Masonry's great work of charity till within the last thirty years. Even from the Fund of Benevolence the grants made used to be so small that ten years ago the accumulations of income under this head exceeded £50,000, and it was then suggested that a portion should be devoted to other purposes. Against this there were strong protests; and the grants have since been so far too liberal, that not only is the income of the fund exceeded, but the accumulations are encroached upon. The voluntary subscriptions to, and other sources of income of, the three Masonic charitable institutions have been increasing enormously every year for the last twenty years. Before that time they were comparatively small, but they now amount in the aggregate to more than £50,000 annually, and their tendency seems to be to increase every year. Thus lodges of Freemasons have drifted on the current of time, till, from being bodies which taught a technical knowledge, they have become assemblages of men who love good fellowship, and who in the course of that good fellowship have made themselves a charitable association. It depends upon themselves and the management of their own affairs whether the prosperity they now enjoy shall be lasting.

Free Tenants. See LAND QUESTION, THE.

Free Trade League Programme. See LAND QUESTION, THE.

Freights, Ship. See SHIPPING AND SHIP-BUILDING.

French Carlists. See FRENCH POLITICAL PARTIES.

French Colonies, The. See FRANCE.

French Political Parties. Political parties in France may be roughly divided into two camps—**Republicans** and **Reactionaries**. There are, however, both inside and outside the Chamber of Deputies, several groups in each of these two divisions. The common principle which unites the Reactionaries in the Chamber is opposition to the Republic; and they sit together to form The Right or Opposition, although representing three distinct parties. The Right has increased its representatives in the Chamber of Deputies from 88 in the last parliament to some 200 in that which met for the first time on November 10th, 1885. The Republicans, although agreed on the cardinal points of

their political creed, were less united than their opponents at the poll on October 4th, 1885; the moderate and extreme sections vigorously opposing one another, to the consequent loss of both, and gain of the Reactionaries, who, for electoral purposes, adopted the name of Conservatives. The system of election in France is that known as *scrutin de liste* (q.v.), which by a vote of the Chamber in the last session of the late parliament (June 1885) was substituted for *scrutin d'arrondissement* (q.v.). There are, for electoral as for administrative purposes, 87 departments in France, returning 568 members to the Chamber of Deputies. There are, further, three departments in Algeria, returning six members, all of whom are Republicans, besides the distant colonial possessions, which are represented in the present parliament by ten Republicans. The number of seats allotted to each department naturally varies according to its population, the Territory of Belfort returning fewest members (2), and the department of the Seine—i.e. Paris—the greatest number (38). The next largest department is that of the Nord, which is represented by twenty deputies, the remaining departments returning from three to twelve. To secure election it is indispensable that at least a fourth of the electors on the register record their votes; and return is further conditional on obtaining an absolute majority of the votes recorded. It only remains to add that the principle of election is by universal suffrage. As already stated, the general election to the present Chamber took place on October 4th, 1885. Less than two-thirds of the candidates, however, obtained the necessary majority, and a second election consequently took place on October 18th. This practically completed the elections, but there still remained a few vacancies, owing to invalidations by the Chamber. It is hardly possible, therefore, to state with precision the strength of the respective groups, although the two main divisions may, as aforesaid, be given, in round numbers, as 200 Legitimists and Bonapartists, and the remainder Republicans of various shades. These divisions may be subdivided as follows:—1. **Opportunists.** This is the most numerous and influential section of Republicanism, and owes its creation to Gambetta. It has seriously decreased, however, both in numbers and in comparative influence, since the death of its founder, under whose guidance it attained a perfection of organisation and political importance exceeding that of any party since the establishment of the Republic. During the presidency of Marshal MacMahon, Gambetta was organising his party with a view to resisting the reactionary designs of the President. Gambetta's warning to MacMahon to *se soumettre ou se démettre* undoubtedly first opened the eyes of Republican France to the intrigues that were going on at the Elysée, and tended greatly to increase the prestige of the Opportunists. During the first three years of M. Jules Grévy's (q.v.) presidency, Gambetta was all-powerful in France, and was the virtual master of the Chamber. Ministries were made and unmade at his pleasure, as none could exist without his support. When a Gambettist cabinet succeeded that of M. Jules Ferry, in November 1881, Opportunism was looked upon as the type of modern Republicanism, and a brilliant career was anticipated for the "ministry of all the talents," as it was called. It fell, however, in

January 1882, two months and a half after its formation, by an adverse vote on the *scrutin de liste* bill, which Gambetta had insisted upon attempting to carry. The overthrow of the ministry was a severe blow to Opportunism; it sustained, however, an even more serious one by the death of Gambetta, on the last day of the year 1882. But although shorn of his vivifying influence, the Opportunist party is still a strong one, and has remained true to its original principles as laid down by Gambetta. Its leader is M. Ranc, who, however, at the election failed to obtain a seat in the present Chamber; and among its prominent members are MM. Jules Ferry, Waldeck-Rousseau, Brisson, Paul Bert, and Spuller. The organs of Opportunism are the *Republique Française*, and the *Temps*.—2. **Conservative Republicans.** This party represents rather a state of mind than a present power either inside or outside the Chamber, its parliamentary following, drawn from the Centre, being at most sixty, while some of these can only be said to accept the Republic on trial. As a healthy Republican germ, however, and a possible bulwark against the inroads of Royalist or Bonapartist reaction, Conservative Republicanism to some extent holds a balance, and so commands greater consideration than it would otherwise obtain on the ground of its numerical strength. The strongest in *posse*, it is the weakest in *esse*. It accepts as its political motto the dictum of M. Thiers, "*La République sera conservatrice, ou elle ne sera pas*;" and it follows, therefore, that it opposes all measures or ideas approaching an imitation of the first Revolution. At its head stand M. Jules Simon, a former prime minister and an able but much suspected statesman; and M. Ribot, a man of ministerial aims and a disciple of M. Dufaure. M. Ribot was also an unsuccessful candidate at the recent election.—3. **Extreme Left, or Radicals.** Not much more than a name in the last parliament, the Extreme Left is a considerable power in the present one, commanding a solid vote of 150. Its chief strength is Paris, which is almost solely represented in the Chamber by Radicals. Its leader is M. Clémenceau, who was doubly returned for the Seine and for Var, and elected to sit for the latter place. M. Clémenceau is designated as a future minister, and at no distant date; although his personal chances of success are held to be destroyed by his programme, which includes an elective magistrature and the immediate separation of church and state. Being powerless of itself in the Chamber, the Extreme Left has hitherto obtained its chief force by a coalition with the Right. This, however, would naturally cease under a Clémenceau ministry, when support was required to carry Radical measures. Among the chief members of the party are M. Lockroy, the "premier élu" of Paris, married to the daughter-in-law of Victor Hugo, Minister of Industry and Commerce in the present De Freycinet cabinet; M. Floquet, the President of the Chamber; and M. Clovis Hugues, the turbulent "poet deputy," who figured prominently in the Commune at Marseilles. M. Clémenceau's organ in the press is *La Justice*.—4. **Intransigents.** Numerically insignificant, the Intransigents make up for their lack of numbers by vigour of action. The head of the faction is M. Rochefort (q.v.), whose attacks upon ministers are made chiefly by

the pen. M. Rochefort has been not inaptly described as the gravedigger of the Empire and of the Gambetta and Ferry cabinets. Chief among his immediate supporters are M. Roques de Filhol, an ex-political convict; M. Basly, a newly-elected deputy for Paris; and a few members of the Extreme Left. To the Intransigent group must also be added the extra-parliamentary and noisy factions known as Collectivists, Social Revolutionaries, and Anarchists, to all of which the generic name of **Communist** (*q.v.*) may be applied. These groups, however, have strong antipathies to one another, although they would probably coalesce for purposes of disorder. The parliamentary programme of M. Rochefort (whose actual name is the Comte Victor Henri de Rochefort-Lucay), is so manifestly subversive that it is scarcely likely to obtain a hearing, either within or without the Chamber, save at a time of great civil commotion.—5. **Monarchists.** The Royalist party is composed of the former Orleanists, and of those followers of the late Comte de Chambord who have accepted the Comte de Paris as his successor. The Duc de Broglie, who twice held office as premier between May 1872 and November 1877, and who lost his seat at Evreux in the recent election by a few votes, is the acknowledged Orleanist leader. Of the followers of the transmitted Chambord doctrine, the chief are the Baron de Mackau, the Comte de Mun (whose recent ultra-Catholic manifesto, however, lost him much of his influence), and M. Chesnelong. The party comprises some two-thirds of the Right, although on a purely anti-Republican question it could probably command about 230 votes in the Chamber. The chief difficulty of French Royalism is the absence of a serious Pretender, the Comte de Paris declining to commit any act that might bring down upon him the oft-repeated threat of expulsion and possible confiscation of his goods.—6. **Bonapartists.** Of this party there are two distinct sections—the “Imperialists” or “Victorians,” and the “Jeromists.” To the former the young Prince Victor, the son of Prince Napoleon and the Princess Clotilde, stands in the light of the future Emperor. The political leaders of the Victorians are M. Jolibois, a former legal functionary of the Empire, and M. Paul de Cassagnac. Prince Victor, who receives a pension of 40,000 francs (£1,600) from an anonymous adherent, has hardly a serious following, but may rather be said to be surrounded by a coterie. His present policy is one of inaction. The **Jeromists**, or adherents of Prince Napoleon, affect to accept the present form of Republic so long as this is the expression of the national will, but aim more or less overtly at what they designate a “Consular Republic.” Of this Prince Napoleon is to be the chief, giving a pledge not to employ any unconstitutional act of violence to convert the Consulate into an Empire. Prince Napoleon's chief adherents are MM. Robert Mitchell, Adelon, Pascal, Lenglé, and Baron Brunet. The political organ of the party is the *Pays*.—7. **The United Right** is the name given to the latest development of the anti-Republican groups, and is intended to embrace Bonapartists and Legitimists alike. It is the invention of M. de Cassagnac, but is manifestly impracticable except for electoral purposes.—8. **The French Carlists** are another anti-Republican faction, with a dream rather than a programme. They are supported by the Comtesse de Cham-

bord (an Austrian archduchess by birth), and aim at the accession to the throne of France of Don Jaime, the son of Don Carlos, whose path to the throne is to be cleared by a series of abdications. The chief adherents to the principle are General Cathelineau and the Comte d'Andigné.—9. **The Naundorffists** are another insignificant Royalist sect. They support the claims of a pretender who assumes to be a lineal descendant of Louis XVII. The Pretender is known by them as the Dauphin.—**The Army** must also be taken into account in dealing with the political life of France. The three surviving marshals, Leboeuf, MacMahon, and Canrobert, are undoubtedly Reactionary, and a large proportion of the superior officers entertain similar views.—**The Navy** is also Reactionary in the main, but has seldom counted for much in French political struggles.

French Protected States. See FRANCE.

French Senate, The. See FRANCE.

French Woollen Industry. See WOOLLEN AND WORSTED MANUFACTURES.

Frere, Sir Henry Bartle Edward, son of Edward Frere, and nephew of the celebrated author, wit, and diplomatist, the Rt. Hon. John H. Frere; b. 1815. Entered the India civil service in 1834, and was secretary to Sir G. Arthur, Governor of Bombay. Appointed in 1856 British Resident, and after Commissioner, in Scinde. For his services during the Indian mutiny he was made a K.C.B. In 1862 he was appointed Governor of Bombay. On his return to England he was made a G.C.S.I. and nominated a member of the Council of India. Appointed in 1872 a Special Commissioner of the British Government to inquire into the state of the slave trade in East Africa, he went to Zanzibar and made a treaty with the sultan abolishing the slave trade. In 1877 he was appointed Governor of the Cape of Good Hope. Created a G.G.B. in 1876. Wrote several works, particularly one as to the “Manner of Preventing Famines in India,” and a lecture upon “Eastern Africa, a Field for Missionary Labour,” “Union of British Colonies of South Africa,” “Letters to Mr. Gladstone on Afghanistan and Central Asia.” In August 1880 he was recalled from the governorship of the Cape of Good Hope, owing to “divergences of views” between himself and the Home Government, and the “failure of the scheme of confederation” under his auspices. On his return to England he published, in December 1880, the “Correspondence with the Secretary for the Colonies as to the grounds of his recall.” He died in 1884, and was interred in the crypt of St. Paul's Cathedral.

Freycinet, Charles Louis de Saulces de, French senator and statesman, b. 1828 at Foix. Educated as an engineer at the Polytechnic School, he held several important mining appointments. From 1855 to 1860 he was Engineer-in-chief to the Chemin-de-Fer du Midi, during which period he initiated important reforms in the working of that railway company. His talents led to his employment by the Imperial Government to make observations in his own and foreign countries. Appointed in 1864 an ordinary engineer of the first class, he was until 1870 a member of the council of the Tarn-et-Garonne. After Sedan, M. Freycinet became Prefect of the same Department. During 1870-71 he was coadjutor of M. Gambetta in the Ministry of War. From 1876 to 1882 he was Senator for the Department of the Seine. His other official appointments

are as follow: Minister for Foreign Affairs, 1877-79; President of the Council and Minister for Foreign Affairs, 1879-80, January to July 1882, and 1885, after the resignation of M. Jules Ferry. On the fall of the Brisson cabinet (Dec. 20th, 1885), M. Freycinet again resumed office. He is the author of several works of acknowledged excellence. In 1878 he was chosen a member of the Academy of Sciences.

Friedrich, Prof. See OLD CATHOLICS.

"Friendly Lead." This is an institution of a semi-convivial, semi-benevolent type, peculiar, in its name at least, to the poor of the Metropolis. One method is to issue mysterious-looking cards, which are generally exposed in a chosen tavern, announcing that at that house on a certain date will be held a "friendly lead" for the benefit of "Bill" or "Tom" So-and-so, who has just "come out of his trouble" (*anglice*, released from gaol), and the friends and companions of the person in question are urged to "rally round," as the *bénéficiaire* has always been willing to help others. The appeal seldom fails, whether it be put in reference to some newly released gaol-bird or more unfortunate individual "who has been out of employment for some time" or has met with an accident. On the evening fixed the company, generally under the chairmanship of some well-known local character, assemble in an upper room of the inn, and while songs are kept going by the vigour of the presiding genius, and liquor—usually beer and gin—is quaffed as liberally as the means of those present will allow, a plate is pushed round and the donations received. The "lead" sometimes takes other forms, but the principle of accumulating small subscriptions for the one object by the medium of conviviality is the same. The associations of such gatherings are of course none of the best, and the manner of gathering the subscriptions is evidently a wasteful one. It is therefore satisfactory to know that the poor who resort to this method of helping each other are now finding other means to the same end in the friendly societies and other schemes of thrift, and that the "Friendly Lead" is an expiring institution.

Friendly Societies. The Friendly Societies Act 1875 consolidates all the law upon the subject up to that year, but has since been amended in several points of small importance. The law respecting friendly societies has two objects: to provide for their being managed honestly and upon sound financial principles, and to facilitate their operations when so managed. Any friendly society consisting of at least seven persons may apply for registration on sending to the public registrar a copy of its rules, a list containing the names of the secretary, trustees and other officers, and

(if it assure an annuity to any member) tables of contributions for such assurance certified by an actuary of five years' standing. The rules must contain certain specified provisions, and amendments in them must be registered. A registered society must have a registered office and trustees, and an annual audit, must make for the registrar annual returns and a quinquennial valuation of assets and liabilities, and must give its members certain facilities of ascertaining its financial position. On the other hand it is exempted from the Corresponding Societies Acts, and from stamp duty otherwise payable on various documents. Its members may nominate persons to receive any sum up to £100, and the nominee may receive this sum without taking out letters of administration if the member dies intestate. Upon the death or bankruptcy of an officer having in his possession in virtue of his office any property of the society, it takes priority over all his creditors. Minors may become members. Certificates of births and deaths are to be furnished to a society at a maximum fee of 1s. Facilities are given for investing its funds, and for prosecuting misappropriation of its property. Disputes between a society and any of its members may be referred to the arbitration of the chief registrar, and upon the application of a certain proportion of the members the chief registrar may hold an inquiry, and upon certain specified grounds direct a winding up. The central registration office is to circulate among the societies such forms of accounts, statistics and tables of assurance as may be useful to them. At the request of the society, or upon proof that a society has been fraudulently registered or has wilfully violated the provisions of the Act, the chief registrar may cancel or suspend its registry. The Act extends to Scotland and Ireland, an assistant registrar being provided for each of those countries. For further particulars, consult the text of the Act and amending Acts. According to the latest return of the Registrar-General of Friendly Societies—which, however, only gives the statistics for 1881—there were on December 31st of that year 81 friendly societies with branches, the total number of branches being 9,250. The number of members returned was 822,403; the funds were £5,446,619; the total receipts £1,146,545; the total expenditure £937,377. These figures are mainly absorbed by the two great orders, the Manchester Unity of Odd Fellows and the Ancient Order of Foresters, which comprised nearly 58 per cent. of the registered branches, and returned about 69 per cent. of the members, 86 per cent. of the funds, 93 per cent. of the receipts, and 91 per cent. of the expenditure. The following are the statistics of these two great societies:—

	Number of Branches.	Number of Members.	Total Assets.	Total Receipts.	Total Expenditure.
Ancient Order of Foresters . . .	2,669	333,158	£ 1,832,922	£ 528,692	£ 430,689
Independent Order of Odd Fellows, Manchester Unity	2,681	290,601	2,835,621	538,043	422,859
Total	5,350	623,759	4,668,543	1,066,735	853,548

Summary of Annual Returns received by the Registrar-General of Friendly Societies for 1884-5:—

Societies.	Number of Societies or Branches.	Number of Returns.	Number of Members.	Amount of Funds.
Societies and Branches under the Friendly Societies Acts (to 31st December, 1882)	Not made } up.	14,545	Not made } up.	£ Not made } up.
Industrial and Provident Societies (to 31st December, 1883)	1,113	921	586,389	8,282,652
Trade Unions (to 31st December, 1884)	209	152	284,967	538,542
Building Societies under Act of 1874 (to June 1885)	2,044	1,838	534,713	49,072,827
Loan Societies (31st December, 1884)	1,423	413	41,710	324,281
Railway Savings Banks	6	6	8,910	661,178
	(depositors)		(depositors)	
Total		17,875		

Friendly Societies, Registrar General's Report of (1885). See TRADES UNIONS.

Friends. The religious society of Friends, commonly called Quakers, was founded in the reign of Charles I. by George Fox. "Friends" are distinguished from other Christian bodies by their belief in the immediate teaching and guidance of the Holy Spirit, and that no one should be paid for the exercise of the gift of the ministry. In obedience to this belief they hold their meetings without any prearranged service or sermon, and, not unfrequently, in total silence. Friends believe that the sacraments of baptism and the Lord's supper are to be taken spiritually, and not in an outward form. Their protests against the use of oaths and against the exaction of tithes and church rates cost them much suffering and frequent imprisonment during the first fifty years of their existence. Even now Friends often allow their goods to be seized rather than pay tithe; and, in Norway, young Friends are imprisoned from time to time because they will not submit to military service, for the absolute unlawfulness of war is one of the leading tenets of the Society. The simple dress which Friends adopted from conviction 200 years ago became stereotyped into a uniform. This dress is gradually being given up, as are the "testimony" against music and singing, and the peculiarities of speech, such as the use of "thee" and "thou" instead of "you," and the avoidance of all titles of courtesy. Of late years there has been a very decided evangelical movement among Friends, under the influence of which the old quietism is dying out. As a result of this change the influence of the Society beyond its own borders, through home missions and adult First Day (Sunday) Schools, has developed to a remarkable extent. In this country Friends have for some time past been about stationary in numbers. In 1884 the Society numbered 15,381 members in Great Britain, 2,834 in Ireland, and 72,118 in the United States and Canada, besides small numbers in some other countries. There is also in America a numerous body of Friends called "**Hicksites**," from their founder, Eliza Hicks, who have separated from the orthodox community and hold views of a Socinian character.

Fringing Beefs. See CORAL REEFS.
"Froissart, Jean." See NOMS DE PLUME.
Froude, Mr. James Anthony, was b. 1818. Educated at Westminster and Oriel Coll., Oxford; graduated (1840); Vice-Chancellor's

prizeman and Fellow of Exeter (1842); ordained (1844). In consequence of his book "The Nemesis of Faith" (1848) he withdrew from the Church and resigned his Fellowship. Contributed to *Fraser's Magazine*, of which for a time he was editor (1871-72), and the *Westminster Review*. Elected Rector of St. Andrew's University and LL.D (1869). Made a tour to the United States (1874), and visited (1874-75) the Cape of Good Hope on a mission to inquire into the Kaffir insurrection. Mr. Froude holds a prominent and distinguished position as an historian, his principal works being "Short Studies on Great Subjects" (1867), "English in Ireland in the Eighteenth Century" (1874), "Julius Cæsar" (1876), "Reminiscences of the High Church Revival" (1881), "Thomas Carlyle," and his latest work, "**Oceana, or England and her Colonies**" (1886).

Frozen Meat Trade. See MEAT SUPPLY.
Fruiters, The Worshipful Company of. See CITY GUILDS, THE.

Fruit Farming. Of late years the consumption of fruit has greatly increased in this country, and consequently fruit growing might be carried on more extensively and profitably in many parts of England than it is at the present time. The area of land under fruit in Great Britain has only been enlarged by 27,731 acres since 1873. In that year the area of arable or grass land used also for fruit trees was 169,808 acres, whilst in 1884-5 it was returned as 197,539 acres. During the same period the area used for **market gardens** shows an increase of 21,599 acres. Taking into consideration the unprofitable results of corn growing since 1879, and the very large annual increase in the **imports of foreign fruits** since 1878, landowners and farmers have hardly given fruit culture the attention which might have been expected. Tenants, however, are not so much to blame as the owners of the soil; for the uncertainty attending the tenure of land has much hindered the development of this branch of agriculture. Occupiers could hardly be expected to plant fruit trees and bushes without getting some security for capital invested, and without provision being made to receive compensation for the benefit done to the land by fruit plantations. It is true, planting orchards is one of the thirteen improvements scheduled in the Agricultural Holdings Acts (q.v.) of 1875 and 1883; but unfortunately it is not compulsory on the landlords to grant leases according to the terms of

these Acts. Even in the cases when these Acts are taken as a basis of a lease, the tenant is not always empowered to plant trees without the consent of his landlord; and should he do so he cannot claim compensation. The consequence is that fruit farming receives little encouragement. In some fruit-growing counties it is customary for the landlord to find the standard trees and the tenant to pay for the planting, but no special compensation for unexhausted improvements is allowed. To develop fruit growing in Great Britain it will in the first place become necessary to amend the law relating to tenant right, so that the occupier can claim just compensation for unexhausted improvements in fruit planting. In the next place a more satisfactory mode of distribution is required, and the railway companies must reduce their charges, and afford more facilities, so that the producer and consumer may be able to come into direct contact. The consumption of fruit in Great Britain is difficult to ascertain, but the total annual home-grown supply has been estimated at about nine million bushels, to which must be added some five million bushels imported from abroad, exclusive of oranges and nuts. The chief fruit-growing counties in England are Hereford, Devon, Somerset, Worcester, Kent, and Gloucester, which have each an average ranging from 27,164 down to 15,179. The area in each of the other counties varies from 5,106 acres in Cornwall to 79 acres in Rutland. The area under fruit in Wales is 3,300 acres, and in Scotland 1,892 acres. There are no official returns for Ireland, where the culture of fruit may be considered to be almost entirely neglected, and where many of the old orchards have been allowed to get into a state of decay through want of enterprise. Amongst the works and treatises on planting and general management of fruit trees, several articles from the pen of Mr. Charles Whitehead, F.L.S., F.G.S., a well-known authority on fruit farming, are published in the *Royal Agricultural Society's Journal*, and are worth perusing. The methods of planting, however, which are usually adopted are as follows:—**Apple trees** are grown in plantations about 30 feet apart, on grass lands 24 feet apart. In plantations it is usual to put gooseberry or currant bushes under them. The same method is adopted for **pear trees**, which are largely grown upon grass and in plantations in Kent and Gloucestershire, and upon grass in Worcester and Hereford. **Plum trees** and **damson trees** are also grown on grass and plantations, the former becoming profitable after five or six years, the latter after four or five. **Plum bushes** are sometimes planted with gooseberry and currant bushes. **Cherry trees** (which are chiefly grown in Kent) should be planted thirty feet apart, upon cultivated ground, with gooseberry and currant bushes under them, and plum trees between them. **Filberts** and **cob-nut trees** are grown from suckers or spawn taken from old trees, or pieces cut from the tree and put in a nursery. In two or three years they are planted out about thirteen feet apart. A small crop may be expected after four years, and a good return

after eight years. **Gooseberry** and **red currant** bushes do well on light, porous land, or in good loam and clay loams. **Black currants** require a deep soil, retentive of moisture, and will thrive in the best descriptions of clay land. An acre of bush fruits should yield on an average about £40 per acre, the expenses of cultivation being calculated at £20, which leaves a net profit of £20. **Strawberries** and **raspberries** are also profitable to grow. A crop of the former has been known to yield fruit to the extent of £110 per acre, but the gross average return might be taken at about £60. The return from raspberries might be taken at about the same amount. Of late years more attention has been paid to strawberry growing in Scotland, where the fruit may be obtained in perfection long after it has been all consumed in the south. In Scotland, as well as in England, some farmers have turned their attention to the manufacture of jams and jellies, and have erected the necessary plant to carry on the manufacture on a large scale. Lord Sudeley has several hundred acres of land in Gloucestershire under fruit trees and bushes of all kinds, for the purpose of converting fruit into jams and jellies; and another manufactory was opened last year near Swanley, in Kent. This is a business which might be largely extended, to the advantage of all those concerned in making the land of this country a source of profit not only to themselves, but to the benefit of the nation at large.

Fry, Mr. Lewis, M.P., of Goldney House, Clifton, a younger brother of Lord Justice Fry, was b. 1832. Member of the firm of Fry, Abbot, Pope and Brown, solicitors, of Bristol. A member of the Town Council of Bristol for several years, he was first chairman of the Bristol School Board. Returned in the Liberal interest as member for Bristol (1875-85); North Bristol (1885).

Fry, Mr. Theodore, M.P., of Woodburn, Darlington, cousin of Lord Justice Fry; was b. 1836. Educated at the Bristol Public School. Belongs to the firm of Messrs. Fry, Janson, and Co., iron manufacturers, of Darlington. Is a town councillor of the borough, and served as Mayor (1877-8); vice-chairman of the Darlington School Board, and J.P. for Durham. Returned in the Liberal interest as member for Darlington (1880-5); re-elected 1885.

Fuller, Mr. George Pargiter, M.P., was b. 1833. Educated at Winchester and Ch. Ch., Oxford. He is J.P. for Wiltshire, and was High Sheriff for the county (1878). Returned in the Liberal interest as member for West Wiltshire (1885).

Fuller-Maitland, Mr. William, M.P., of Garth House, Bulth, Brecknockshire, and Stansted, Bishop Stortford, Essex, was b. 1844, and educated at Harrow and at Christ Church, Oxford. He is a J.P. and Deputy Lieutenant for Brecknockshire, also J.P. for Essex. Mr. Maitland was elected in the Liberal interest for Brecknockshire (1875-85); re-elected 1885.

Fullerton, Lady Georgiana. See BOOK TRADE.

Fyrd and Fyrdbat. See ARMY.

G

"G. A." See MARINE INSURANCE.

Gage, Henry Charles Gage, 5th Visct. (creat. 1720); b. 1854; succeeded his grandfather 1877.

Gainsborough, Charles William Francis Noel, 3rd Earl of (creat. 1841); b. 1851; succeeded his father 1881.

Gale, Lieut. See BALLOONING.

Galekas. See KAFFRARIA.

"Gallican Church," The. See OLD CATHOLICS.

Gallicanism. See ULTRAMONTANISM.

Gallipoli. A town of about 21,000 inhabitants, situated on the Dardanelles, chiefly known as the place whither English ships were sent during the Crimean war.

Galloway, Alan Plantagenet Stewart, 10th Earl of (creat. 1623); Baron Stewart of Garlies, by which title he sits in the House of Lords; b. 1835; succeeded his father 1873. M.P. for Wigtown (1868-73).

Galvanic Battery. See ELECTRICITY.

Galboa. See PANAMA CANAL.

Game, Close Time for, etc.

Name.	England.	Scotland.	Ireland.
Black Game or Heath Fowl ...	Dec. 11 to Aug. 19 Dec. 11 to Aug. 31 in Somerset, Dev. and N. Forest	Dec. 11 to Aug. 19	Dec. 11 to Aug. 19
Bustard ...	Mar. 2 to Aug. 31	none	Jan. 11 to Aug. 31
Deer, Male	none	none	Jan. 1 to June 9
" Fallow	none	none	Michaels. to Dec. 31
Grouse or Red Game	Dec. 11 to Aug. 11	Dec. 11 to Aug. 11	Dec. 11 to Aug. 11
Hare ...	none	none	April 21 to Aug. 11
Heath or Moor Game	none	as "Muir-fowl."	Dec. 11 to Aug. 11
Landrail ...	as "Wild Birds."	as "Wild Birds."	Jan. 11 to Sept. 19
Muirfowl, or Ptar-migan ...	none	Dec. 11 to Aug. 11	Dec. 11 to Aug. 19
Partridge...	Feb. 2 to Aug. 31	Feb. 2 to Aug. 31	Jan. 11 to Sept. 19
Pheasant ...	Feb. 2 to Sept. 30	Feb. 2 to Sept. 30	Feb. 2 to Sept. 30
Quail ...	as "Wild Birds."	as "Wild Birds."	Jan. 11 to Sept. 19

The Wild Birds Protection Act, 1880 (*q.v.*) fixes their close time from March and to July 31st (except in Isle of Kilda). The penalty for infringement is in the first case a reprimand and costs, in the second and subsequent cases 5s. and costs for each bird. A large number of birds, however, (some 86) are protected by a penalty of £1 for each bird in each case.

Game Laws. Animals *feræ naturæ* (wild

animals) are not in English law subjects of property, and therefore are not protected by the law of larceny. Special statutes, accordingly, have been enacted for the preservation of game, and these are known as the game laws. Game, as a legal term, comprises hares, pheasants, partridges, grouse, heath or moor game, black game and bustards (1 and 2 Will. IV., c. 32, s. 2). By the important Act of 1832, which repealed all previous (excepting that of 1828, which is still in force), unlawfully taking or destroying game or rabbits by night, whether on open or on enclosed land, or on public roads and highways, and being in such places with guns, etc., for the purpose of taking or destroying game or rabbits, was made a crime, instead of merely a finable offence, as heretofore, rendering the culprit liable, for a first offence, to imprisonment with hard labour not exceeding three months, and to give sureties for good behaviour for a year; for the second offence to double the above penalty; and for the third offence to penal servitude not exceeding seven years. Violent resistance to arrest by authorised persons renders the offender liable to the last-named penalty. If three or more persons enter upon any land to take game or rabbits, any of them being armed with offensive weapons, they commit a misdemeanour punishable by penal servitude to the extent of fourteen years. Persons trespassing on land in pursuit of game in the daytime are liable to a fine of £2 for trespass, and £5 for resistance. Persons reasonably suspected of coming from land where they have been unlawfully in pursuit of game, and their carts, may be searched in any public place by the police, and if convicted forfeit the game, guns, etc., found in the course of such search, and become liable to a fine. The above are only the most important penal provisions of the law relating to game. Before 1832 the right to sport and kill game was vested in persons qualified by birth and estate (1604), later (1670) qualified persons were allowed to appoint gamekeepers; but the Act of 1832 abolished all prior qualifications for sporting, and vested the right of game in the owner, subject to arrangement between landlord and tenant. By the statute 1 and 2 Will. IV., c. 32, a person who has obtained an annual game certificate may kill game subject to such proceedings as may be taken against him for trespass. Originally a landlord had no right to enter for the purpose of killing game upon ground demised by him. Since the passing of the above statute it has been a matter of bargain between landlord and tenant whether the one or the other, or both, should have the right to kill game. But by the Ground Game Act, 1880, it is provided that the occupier of land (the tenancy of which has been created since Sept. 7, 1880) shall have the right to kill ground game (hares and rabbits) thereon equally with the landlord, and shall be unable to alienate this right; but he may authorise certain others to kill his game.

Gando. See SOUDAN.

Ganneau, M. Clermont. See MAHDI.

Garashanine, Ilija. See GARASHANINE, MILOUTINE.

Garashanine, Miloutine, the present President of the Servian Ministry, and Minister for Foreign Affairs, was b. 1844. His father, **Milja Garashanine**, was a prominent statesman. Miloutine Garashanine, educated at Belgrade and Paris, and in the Ecole Spéciale d'Application at Metz, returned to Servia (1868). On the accession to power of Prince Milan (*q.v.*), M. Garashanine, who entered the Skupschina for the Grozka District (1874), served as captain in the Balkan war, and became, on the retirement of M. Ristich (*q.v.*), Minister of the Interior in the first Progressive Ministry. Became envoy at Vienna (1883), Minister of Foreign Affairs (1884). During his ministry he has also been Minister of Public Works and Finances, and played a conspicuous part in the recent Servo-Bulgarian dispute (1885-86). It is stated that M. Garashanine is about to resign office.

Gardner, Alan Hyde Gardner, 4th Baron (creat. 1800), b. 1836; succeeded his kinsman 1883. The peerage was conferred for naval distinction.

Gardner, Mr. Herbert, M.P., of Debden Hall, Saffron Walden, was b. 1847. Educated at Harrow and Trin. Coll., Cambridge. Is a Deputy Lieutenant for Middlesex. Returned in the Liberal interest as member for Saffron Waldon Division, North Essex (1885).

Garibaldi. See ITALY.

Garter King-at-Arms. See HOUSE OF LORDS.

Garter, Order of the. Originally established by King Edward III. in 1349. The Order is limited to twenty-five Knights, members of the Royal Family and Foreigners. Its abbreviation is K.G., and it is the highest order of knighthood. Its badge is a gold medallion of St. George and the Dragon, suspended from a blue ribbon; and the Garter, which is worn below the knee of the left leg, is made of dark blue velvet. Its motto is "*Honi soit qui mal y pense*" (Evil to him who evil thinks"). There are at present fifty-eight K.G.s in all, including the Sovereign.

Gaskell, Mr. Charles Milnes, M.P. Educated at Eton and Trin. Coll., Cambridge, and is a barrister-at-law. Returned in the Liberal interest as member for South Morley Division, West Riding (1885).

Gas-Light and Coke Co., A Stock. See ILLUMINANTS.

Gas Lighting and Referees. See ILLUMINANTS.

"Gaston, Marie." See NOMS DE PLUME.

Gate Money Meetings. See RACING.

Gathorne-Hardy, The Rt. Hon. John Stewart, M.P., of Brandford, Goudhurst, Kent, the eldest son of Viscount Cranbrook (*q.v.*), was b. 1839. Educated at Eton and Christ Church, Oxford. Is Deputy-Lieutenant and J.P. for Kent, lieutenant-colonel of the East Kent Volunteers, and was secretary to Viscount Cranbrook when President of the Poor Law Board. Returned in the Conservative interest as member for Rye (1868-80); Mid Kent (1884-85); re-elected 1885.

Gatling Gun. See ARTILLERY.

Gaugers. See REVENUE, THE.

Gavelkind. See LAND QUESTION, THE.

Gay-Lussac and Biot, MM. See BALLOONING.

"Gazetta di Genova." See NEWSPAPERS.

Gazette, The. See LONDON GAZETTE.

Gbomé. See TOGO-LAND.

Gegenbauer, Classification of. See ZOOLOGY.

Gellie, Dr. A. See CORAL REEFS, GEOLOGICAL SURVEY, and GEOLOGY.

Gemara. See TALMUD.

General Assembly. The General Assembly is the highest court of the Presbyterian State Church of Scotland, and consists of representatives, clerical and lay, from all the presbyteries of the Church in Scotland and Ireland, also delegates from the universities and Scottish royal burghs. It meets annually in Edinburgh in May, and sits about ten days. The deliberations of the General Assembly are presided over by a moderator, and are also attended by an officer representing the State (the Lord High Commissioner), who, however, has no voice in its procedure or decisions. During the sitting of the Assembly the Lord High Commissioner, a Scottish nobleman, holds semi-regal state in the palace of Holyrood.

General Council of the Department of the Bouches du Rhone. See ENGINEERING (MARSEILLES SHIP CANAL).

General Police and Improvement (Scotland) Act, 1872. See WOMEN'S RIGHTS.

Generations, Alternation of. See PAR-TENOGENESIS.

Genghis Khan. See CHINA.

Gent Davis, Mr. Robert, M.P., son of Mr. Robert Davis, of Priory Road, Hampstead, was b. 1857. Engaged in business as a manufacturing chemist. Returned in the Conservative interest as member for Kennington (1885).

Geok Tepé. The series of expeditions Russia undertook after landing at Krasnovodsk in 1869, to subjugate the Turcomans, culminated in the disastrous defeat of General Lomakin ten years later at Geok Tepé. To retrieve this, Skobelev was sent in 1880, and after some months' preparations he besieged the Tekke stronghold. The place held out three weeks with wonderful pertinacity, but was taken by assault Jan. 24th, 1881, followed by a frightful massacre of 8,000 fugitives, no quarter being given.

Geological Record. See GEOLOGY.

Geological Society of London. See GEOLOGY.

Geological Survey. This organisation was founded by Sir H. T. De la Beche, who commenced work single-handed in the south-west of England about 1830. The Geological Survey was officially recognised as a branch of the Ordnance Survey in 1834. In 1845 it was placed under the office of Woods and Forests, and in 1854 under the department of Science and Art. The entire geological survey of England on the one-inch ordnance maps (scale 1: 63,000) has just been completed; the six-inch scale (1: 20,560) has been used for coal-fields and other important districts. The drifts were formerly neglected; but of late these have been mapped, and hence many sheets are issued in two editions—one showing the solid geology, while the other, or drift-map, shows the superficial deposits. The maps are illustrated by horizontal and vertical sections, and by explanatory memoirs. The geological survey of Scotland was commenced in 1854, and that of Ireland in 1845. The survey of each country is placed under a director, and the three surveys are united under a director-general. The successive directors-general have been Sir H. T. De la Beche (1845-55), Sir E. Impey Murchison (1855-72), Sir A. O. Ramsay (1872-81), and

Professor A. Geikie (1881). [For further information consult "The National Geological Surveys of Europe," by W. Topley (Trübner & Co., 1885).]

Geologists' Association. See GEOLOGY.

Geology, a science which deals with the structure and history of the earth. The materials of which the earth's crust is composed, whether hard or soft, are termed **rocks**, and the study of rocks is known as **PETROLOGY** (*q.v.*). The processes by which rocks have been formed and disturbed, and by which the present features of the earth's surface have been developed, are discussed in the department of **Dynamical Geology**. The history of the earth, as revealed by its rocks, is known as **Historical Geology**, or more commonly as **Stratigraphical Geology**, because a large part of the earth's crust is formed of beds of sedimentary matter termed **strata**. Many of the stratified rocks enclose the remains of animals and plants, and the study of these fossils forms the department of **PALÆONTOLOGY** (*q.v.*). The speculations of early writers on the earth related rather to the origin of our planet than to its present structure; hence they bore not so much on geology as on cosmogony. Indeed, geology can hardly be said to have had any existence as a science until **James Hutton**, in 1795, published his "**Theory of the Earth**," in which he laid down the fundamental principle that the past phases of the earth can only be interpreted by studying the action of the forces at present at work upon its surface. The Huttonian philosophy was developed by **Sir Charles Lyell** in his famous "**Principles of Geology**" (1830). Geologists who hold that the agents which made and modified the rocks have always been such as are now in operation are termed **Uniformitarians**. They opposed and superseded a school which sought to explain the past by invoking cataclysms and sudden revolutions in nature, whence they have been called **Catastrophists**. The modern tendency of geologists is to believe in a modified uniformitarianism; admitting that the natural forces by which the rocks have been formed, though always of the same kind as those at present at work, must have acted with greater intensity in the early periods of the earth's history. The modern advances in astronomical physics have led geologists to encourage speculations on the primal phases of the earth's evolution, and have thus tended to a revival of cosmological studies. The fundamental doctrine in geology, that all stratified rocks have a definite order of superposition, indicating a chronological sequence, and may be roughly identified in distant localities by means of their organic remains, was clearly demonstrated by **William Smith**, who constructed in 1815 the first geological map of England, and is known as the "**Father of English geology**." The whole series of strata has been divided into three large groups, known in ascending order as the **Primary** or **Palæozoic**, the **Secondary** or **Mesozoic**, and the **Tertiary** or **Kainozoic** (**Cenozoic**). Above the Tertiaries a group of deposits termed **Quaternary** or **Post-tertiary** is usually recognised by geologists; but some authorities class these deposits with the Tertiary system. Below the base of the Palæozoic series, a great group of altered rocks may be detected, known as the **Archæan** or **Pre-cambrian** (**Eozoic**, or formerly **Azoic**) group. Some of the most animated recent discussions in British geology

relate to these ancient rocks. One school, led by **Dr. Hicks**, believes that many of the rocks regarded by the Geological Survey as altered palæozoic strata are really of pre-Cambrian age. Such rocks occur at St. David's, in Carnarvonshire, Anglesea, the Malvern Hills, the Wrekin, and Charnwood Forest. The vexed question of the age of the crystalline schists of the Scottish Highlands takes its place here. **Sir R. Murchison** showed that the gneiss of the extreme north-west of Scotland is pre-Cambrian, but he regarded the great mass of the schists of the Highlands as altered Silurian strata. The Geological Survey (*q.v.*), under **Dr. A. Geikie**, has however lately shown that part at least of this area is formed of Archæan rocks, which by great overthrust faults have been thrust locally over strata containing Silurian fossils, the Archæan and later rocks being inextricably mingled and metamorphosed, thus verifying the views of **Lapworth**, and to some extent those of **Nicol, Hicks, Bonney** and **Callaway**. Another question which for years has agitated stratigraphical geology relates to the boundary between the Cambrian and Silurian strata; the partisans of **Sedgwick** advocating an upward extension of the Cambrian system to the base of the May Hill (Llandovery) group, while the friends of Murchison would carry the Silurian system down to the base of the **Menavian** beds. The following table exhibits, in descending order, the main divisions of the **Geological Record**; and for details of classification the reader is referred to **Geikie's "Text-book of Geology,"** 2nd edition, 1885 (Macmillan and Co.)

Table of Strata.

QUATERNARY or Post-Tertiary	{ Recent and Pre-historic. Pleistocene. Pliocene. Miocene. Oligocene. Eocene.
TERTIARY or Cenozoic . .	{ Oretaceous. Oolitic. Lias. Rhætic. Trias.
SECONDARY or Mesozoic . .	{ Permian or Dyas. Carboniferous.
PRIMARY or Palæozoic .	{ Devonian and Old Red Sandstone. Silurian. Cambrian.
ARCHÆAN—Eozoic, or Pre-Cambrian.	

Geology is represented in this country by the **Geological Society of London**, which was founded in 1807, and is now located in Burlington House (President for 1886, Professor Judd). There are also in London the **Geologists' Association** (President, W. Topley), and the **Society of Amateur Geologists** (President, Dr. Maybury). **George I.** (Christian William Ferdinand Adolphus George), **King of Greece**, b. 1845. Son of the present King of Denmark, and himself the brother of H.R.H. the Princess of Wales. In 1863 King Otho I. abdicated, and Prince George ascended the throne of Greece in succession. The crown had been offered to the present Duke of Edinburgh, but was declined by the English cabinet; the same offer was made to the Duke Ernest of Saxe-Coburg Gotha, who also refused it. Finally, Prince George accepted it, with the approval of Europe. Before he was called to the throne he

served in the maritime forces of Denmark. He married, in 1867, the Princess Olga, daughter of the Grand Duke Constantine. Under the reign of King George, Greece has obtained an extension of territory granted in virtue of a decision of the Congress of Berlin. (For principal events of his reign see GREECE.)

George, Mr. Henry, was b. in Philadelphia 1839. Educated at the leading college of that city, but became dissatisfied with study, and finally went on a voyage as cabin-boy to India. On his return to Philadelphia he was for some time employed in the printing business, but finally shipped on board a United States steamship for San Francisco, there establishing himself, first as compositor and afterwards in the editorial department of one or two of the leading newspapers of that city. After the collapse of the paper with which he was connected he applied himself to the "land question," and in 1871 published a pamphlet entitled "**Our Land and Land Policy**," setting forth in vigorous language his particular views on this subject; and he subsequently started a penny paper, in which the same matters were also treated, he himself writing the editorial articles. After passing through some vicissitudes in his journalistic career, he came to England in 1881. At that time the land agitation, with the political disturbances growing out of it, had set in in Ireland, and Mr. George placed himself in connection with the most noted of the Irish leaders, and entered warmly into their views on the land question. He lectured in 1882 in Dublin on this subject, and becoming an object of suspicion on the part of the Irish Government, he was arrested. On his release he wrote a letter to the President of the United States, couched in vigorous terms, complaining of the treatment to which American citizens were subjected in this country, etc. In 1880 he had published a work in the United States entitled "**Progress and Poverty**," in which all the social problems affecting property in land principally—together with others touching the social condition of the labouring classes—are dealt with from Mr. George's point of view. One of the results arising from the publication of this work was the formation of the **Free Soil Society** of America. It was subsequently published in this country, and contributed to the foundation of the **Land Reform Union** in 1883. At the invitation of this Society Mr. George, who had returned to the United States, revisited this country in 1884. A large meeting in support of his views was held in St. James's Hall, and he afterwards addressed meetings in the principal towns of England and Scotland. The **Scottish Land Restoration League** was formed in Glasgow, by whom he was entertained at a large banquet before leaving England, and also at the "Criterion," in April 1884, when delegates from the provinces were present. He finally addressed a meeting in Dublin (Mr. Davitt in the chair), before sailing for the United States.

Gerard, Robert Tolver Gerard, 1st Baron, b. 1808; raised to the peerage 1876.

Germ Theory of Disease is the term applied to the theory which attributes certain morbid processes to the presence of living organisms. In 1839 Sir Henry Holland advocated the doctrine that the source of epidemic disease is in animalcule life, and in 1847 Mitchell, of Philadelphia, presented facts and arguments in support of the same theory. The recent de-

velopment of microscopy, and the elaborate and complex experiments with regard to spontaneous generation, and a more exact knowledge of the lowest appreciable forms of life, have made the probability of the truth of this theory now almost a certainty. Pasteur has proved that certain organisms are the initiators of all chemical fermentations and putrefactions; and the elaborate experiments of Koch, Lister, Cheyne, etc., have proved that *Bacteria* (*q.v.*), and allied organisms are the initiators of contagious diseases, and of certain changes in wounds. At any rate the co-existence of organisms with fermentations and contagious diseases suggests that they stand in causal relationship with these fermentations and diseases; and experiments, when conducted with minutest care to exclude error, have confirmed this theory. The germ theory of disease being a derivative doctrine from the germ theory of fermentation, is dependent upon this latter, and some (Charlton Bastian, Pouchet, etc.) who are the apostles of the theory of **spontaneous generation**, believe that the organisms which are found in fermenting liquids are generated from the organic compounds which are dissolved in the fermentable fluids. Their experiments have been proved by Tyndall, Lister, Cheyne, etc., to be inaccurate, and the weight of the evidence of the best scientific men is on the other side. With regard to the pathogenic properties of bacteria, some (Klebs, Virchow) suppose that the organisms act as ferments giving rise to deleterious chemical products, whilst others (Bollinger) suppose that they act by withdrawing some important constituent from the organism, such as oxygen; but the whole question is still under the most minute examination. The **germ theory** explains better than any other the pathological events of infectious diseases, with regard especially to their latency during the incubation period of the disease, and to the fact that the intensity of the disease bears no proportion to the quantity of virus received, and that an inappreciable quantity of virus is sufficient to produce the disease of which it is the cause. Antiseptic surgery, with its brilliant results, depends entirely upon the germ theory. (See ANTISEPTIC TREATMENT) These organisms cannot develop their kind or their products if deposited alone on an entirely healthy surface. For instance, a tubercle bacillus coming into contact with a healthy mucous surface cannot retain itself long enough to perform any pathogenic function, but if there should be a particle of caseous material, say in an air vesicle or small bronchus, or if there should be a weakened epithelial surface, the *Bacillus* (*q.v.*), having found a coign of vantage, will multiply and elaborate ferments, which with the bacillus will attack the epithelial surface with which it may be in contact, and so will make a field for further action. Thus the septic organism attacks tissues which have lost their vitality by bruising, laceration, etc., or by operation. There can be no doubt that as soon as the germ theory is established scientifically, and our knowledge of the life-history of the various morbid germs extended, great changes will be wrought in both pathology and therapeutics.

German Clerical Party. See AUSTRIAN POLITICAL PARTIES.

German Colonisation. Since Prince Bismarck has achieved the unity of the German Empire, and given to his nation a leading position in the councils of Europe, he has, for

various reasons, endeavoured to establish a colonial empire; but the principal motives which have urged him to the course he has adopted, have been doubtless the extension of German commerce, and the desire to turn the stream of emigration from the Fatherland, which now flows so strongly towards America, to countries in which the Teuton, although he may change his habitation, will not have to change his flag and his nationality. Unfortunately for this latter portion of Prince Bismarck's designs, the portions of the globe which are most suitable for the purposes of colonisation by the races of temperate climates have already been mostly occupied, and he has had to direct his attention to Africa and the Pacific to find places where the German flag may be hoisted and German dominion or protectorate be proclaimed. A great colonial empire, such as that of Great Britain, it is impossible for him to obtain, and all his efforts in colonisation have been marked by a certain degree of artificiality, when contrasted with the spontaneous growth of the "Greater Britains beyond the Seas," or the spread of our rule in India. In America and in our own colonies the Germans form an important portion of the population, and are amongst the most successful and law-abiding of colonists, but they rarely or ever return to their own country, and the wealth of which they become possessed is of little or no benefit to those who remain at home. The reason of this is not far to seek, since people who have become accustomed to freedom from the merciless tax of conscription are never likely to return to a country where their sons are liable to be taken from lucrative employment or the prosecution of scientific pursuits; and instead of returning to the Fatherland, the German who has made his fortune in distant foreign lands either settles in them altogether, or comes to live in England. Prince Bismarck having seen this, has attempted in every way to foster a spirit among the Germans favourable to the formation of German colonies, and the German flag has been planted in many parts of the world; but it is especially in Africa, since the new rules as to annexations in that continent were made at the recent Berlin Conference, that the efforts of the Germans to extend their empire have been most marked. Before the Conference, however, Herr Luderitz had concluded some treaties with natives in the neighbourhood of Angra Pequena, and after some diplomatic correspondence between the German Chancellor and Earl Granville, the territory mentioned in these agreements was definitely declared to be German. Though all the diplomacy of Germany was exerted in support of the claims of Herr Luderitz, the acquisition can prove of but small value commercially, and of none for the home of German emigrants, and it must have been acquired chiefly for the purpose of giving Germany a claim to be heard in the settlement of South African affairs. A similar attempt was made by Herr Luderitz to acquire land in the neighbourhood of San Lucia Bay, on the coast of Zululand, and there also to establish a German colony, which would have been in communication with the Transvaal, to be utilised, if desired, to the disadvantage of British interests in South Africa; but in this attempt he has fortunately been foiled. The country of Usaghara, lying inland from the dominions of the Sultan of Zanzibar, has like-

wise been acquired by a series of private treaties the meaning of which it is more than doubtful if the native parties understood, and over which the Sultan of Zanzibar certainly possessed claims which should have rendered his sanction necessary before these treaties were considered valid; but under pressure he has consented to this rich country, which commands his trade routes to the lake regions, being formed into a German colony, and he has also had to acquiesce in the occupation of Vitu, on the coast, and the acquisition of the healthy and fertile slopes of the mountain of Kilima Njaro (*q.v.*). The effect upon the future of trade and the progress of civilisation remains to be proved; but from what we hear of the despatch of rifles and Krupp guns, and the intention to raise and drill a native army, it is evident that they will be administered actively and in accordance with the designs of the Prussian chancellor. Gerard Rohlfs, the traveller, has been employed as the diplomatist in these transactions, and also in Abyssinia; while on the west coast of Africa another African traveller, Herr Nachtigal, as the Imperial commissioner, has been engaged in the foundation, actual and attempted, of other German colonies. One failure took place with a chief residing on the mainland, near the Isles de Los, who peremptorily refused to have anything to do with the Imperial commissioner or his proposals, and he had to retire discomfited. The final settlement of the Angra Pequena question was part of the labours of Herr Nachtigal, who was the principal party in the foundation of the German colony of the Camerões. This acquisition of the Camerões places the future sanatorium of the Rights in the hands of Germany, and has also dealt a serious blow to the prospects of English trade in those regions. The principal trade of the Camerões has, up till now, been in the hands of the English, and the maintenance of order and the protection of the merchants has been hitherto the work of Her Majesty's consuls and naval officers; and treaties, which have now been abrogated, had been concluded with most, if not all, of the more important native chiefs. It was intended to have proclaimed a British protectorate over the district, to maintain the interests which have grown up under our fostering care; but the illness of our consul prevented the final steps being taken in time to anticipate the action of the Germans. In the Pacific also Germany has been seeking for colonies, and here her action has clashed with the claims of Spain, and raised such a storm of indignation in the Iberian peninsula that the dispute was submitted to the arbitration of Pope Leo XIII. (see *CAROLINE ISLANDS*). What the benefit to Germany of her new colonies may be, has yet to be proved; but a reaction is setting in, and the Germans are beginning to count the cost of becoming a colonial power. It is stated that the German trade with her African possessions is only $\frac{1}{3}$ per cent. of her total commerce, and an army and navy raised by conscription cannot be used for the maintenance of these outlying dependencies in the same manner as the volunteer forces of Great Britain.

German Confederation. See *GERMANY*.
German Political Parties. The centre of political life in the German Empire is the *Reichstag* or *Imperial Diet*, in which, together with the *Bundesrath* or *Federal Council*, are vested the legislative functions of United

Germany. There are sharply defined limits, however, to the power of both. The Reichstag's decisions may be overridden by the Emperor, to whom is intrusted the supreme direction of military and political affairs. The Emperor has the power of declaring war, if for purely defensive purposes, of making peace, of contracting treaties, and appointing ambassadors and envoys, without the consent of either legislative body. To declare war for other than defensive purposes, however, the assent of the **Bundesrath** is required. The latter body, which represents the individual states of the Empire, as the Reichstag represents the German nation, consists of fifty-eight delegates. Of these, seventeen, including Prince Bismarck (*q.v.*), sit for Prussia, six for Bavaria, four each for Wurtemberg and Saxony, three each for Baden and Hesse, two each for Mecklenburg-Schwerin and Brunswick, and one each for the remaining states, including the free towns of Hamburg, Lübeck, and Bremen. Of its functions, it may be said that the Bundesrath is mainly a confirming body, although it has the privilege of rejecting measures passed by the Reichstag. This it has not infrequently done, notably in the case of the measure repealing the **May Laws**, which, twice passed by the Reichstag, has been each time rejected by the Bundesrath. It has also a limited initiatory power, which it occasionally exercises. Members of the Bundesrath have the right of appearing in the Reichstag, and of speaking on any question in which the State they represent is directly interested. Members of the one chamber, however, are not eligible for election to the other, although they may sit in their respective provincial diets. The Reichstag is composed of 397 members. Of these 236 constitute the elected of Prussia, 48 represent Bavaria, 23 Saxony, and the remainder the other states in due proportion, ranging from 1 to 17. The Reichstag is split up into ten distinct groups, inclusive of the **Independents** or "**Wilds**," who number eight in the present Parliament. For general purposes, however, these ten groups may be reduced to five parties. The largest individual party is the **Centre**, or **Ultramontane**, which obtains its chief strength in the Rhine districts and South Germany. It numbers 109, and is the most compact and obedient of all the parties in the House. The Centre aims at securing the complete repeal of the **May Laws**, which is the name given to the present measures regulating the relations between Church and State in Prussia, and which confine the privileges of the Catholics, particularly of the clergy, within narrow bounds. The chief measures are those passed on May 11th, 1873, and May 4th, 1874. Alternately cajoled and threatened by Prince Bismarck, the Centre party, which is admirably led by **Dr. Windhorst** (*q.v.*), gives it to be clearly understood that its support of the Chancellor's own schemes must be paid for by concessions. As a consequence there is a more or less constant barter going on between the party and the Imperial Chancellor. Next in point of strength come the **German Conservatives**, who number 75 in the present parliament, against 53 at the close of the last. They constitute the nucleus of the Ministerial party, chief among their number being **Herr von Gossler**, Count von **Moltke** (*q.v.*), **Herr von Puttkamer**, and **Herr**

von Kleist-Retzow. Closely allied to the German Conservatives are the German "**Reichspartei**," or **Imperialists**, who number 28. Their name sufficiently indicates their politics; and although differing from the German Conservatives on one or two minor points of detail, they also go to form the Ministerial party. **Dr. Delbrück**, the **Duke von Ratibor** and **Count Herbert von Bismarck** are among the chief members of the party. Standing in somewhat close relationship to the two foregoing parties are the **National Liberals**, a remnant of a once great and historical party, who command fifty votes in the Reichstag. Previous to 1879 the National Liberals, under the leadership of the late **Dr. Edward Lasker** and **Herr von Bennigsen**, were the most powerful party in the House. In 1879, however, the party split on the question of Protection; one half, led by **Herr von Bennigsen**, retaining the old name, but largely accepting Conservative principles, while the remainder adopted **Dr. Lasker** as their chief, and styled themselves the **Liberal Union** or **Secessionists**. The result was that in the last parliament the National Liberals were represented by 45 members, and the Secessionists by 47. The latter, however, effected a fusion with the **Progressists**, and adopted the name for the united party of "**Deutsche Freisinnige**" (**German Liberal party**). The combined party then numbered 105. At the election of October 27th, 1884, however, the party suffered a serious reverse, and is in the present Parliament only 65 strong. It constitutes, nevertheless, the strongest force of the Liberal Opposition, and is well led by **Herr Eugen Richter**. Among its prominent members are **Professor Virchow**, **Dr. Hänel**, and **Dr. Bamberg**. Next in point of numbers are the **Social Democrats**, to whom the last election brought such a conspicuous triumph. Thirteen at the close of the last Parliament, they are now 24, and have, therefore, the power of introducing measures of their own—every measure brought before the Reichstag requiring the signature of 15 members. Their political views are very advanced, and they are the especial antipathy of Prince Bismarck, who has (and notably in 1878, when a stringent Anti-Socialist law was passed) repeatedly tried to crush them. Their literature has been declared contraband, their societies dissolved, their meetings forbidden, and they themselves expelled from their places of residence, and occasionally imprisoned. In the 1884 election they polled 68,910 votes, their previous records being: 1867, 67; 1871, 2,058; 1874, 11,279; 1877, 31,522; 1878, 56,147; and 1881, 30,178—the falling off in the latter instance being alleged to be due to the rigorous application of the **Anti-Socialist Law**. Their more prominent members are **Herren Hasenklever**, **Liebknecht**, and **Bebel**. The "**Volkspartei**," or **Democrats**, an insignificant fraction, only 7 in number, are in the borderland between the German Liberals and the Social Democrats. The chief member of the group is **Herr Sonnemann**, a Jewish journalist. There remain the three groups of **Poles** (16), **Alsace-Lorrainers** (15), and **Independents** (8)—the latter being **Guelphs** or **Danes**. All three are parties of protest, and being for the most part Roman Catholic, they invariably vote with the Centre party. Their *raison d'être*, however, is opposition to the Empire, and they would certainly forsake the Centre if they became a National party.

German Protestant Reformed Church, one of the German churches in London, founded in 1698. The church for many years stood in the Savoy, but had to be removed from there in 1819, when Waterloo Bridge was built. It was then erected in Hooper Square, Leman Street, E. Again, however, the building had to be sold, and was pulled down in 1885. A new church is in course of erection in Goulston Street, High Street, Whitechapel, E., at a cost of £8,000. Since 1853 a German-English school is in connection with the above church. The congregation, consisting of about 1,000, is distributed all over London and the suburbs. The church, formerly supported by the kings of Prussia, afterwards by the kings of England, is since the beginning of this century self-supporting, and is very flourishing.

German Woollen Industry. See WOOLLEN AND WORSTED MANUFACTURES.

Germany. The German empire is a confederation of German states under the presidency of the Emperor William of Hohenzollern, king of Prussia. By the constitution of the 16th April, 1871, all the states of Germany are to form an eternal union; direction of political and military affairs vested in an elective emperor, who may declare war, but if not defensive, consent of Federal Council required. The legislative functions of the empire vested jointly in a Federal Council (Bundesrath) of 58 members appointed by and representing the individual states, and in a chamber of 397 members elected by ballot and universal suffrage, representing the German nation. The following states are included in the confederation:—The kingdoms of Prussia, Bavaria, Württemberg, and Saxony; the free towns of Hamburg, Lubeck, and Bremen; the imperial province of Elsass-Lothringen; the grand duchies of Baden, Mecklenburg, Brunswick, Oldenburg, and fourteen smaller principalities. Area, 212,028 square miles; population about 45,230,000. The expenditure upon federal objects—army, navy, diplomatic, postal and telegraphic services, etc. (amounting in 1884 to £29,540,000) to be approved by the Reichstag, and provided for by the contributions of the members of the confederation in specified shares. The army in peace consists of 450,000 men, in war 1,535,000; the navy of 25 iron-clad and 70 other vessels. The national debt is about £27,800,000, but there is also a sum of £35,350,000 invested for various federal purposes. In 1870 the North German Confederation comprised all the German states north of the Maine, under the headship of Prussia, united in military alliance with Bavaria, Württemberg, and Baden. War against France was declared on 19th July, 1870, amid the universal enthusiasm of the German people. (For description of the cause and events of the war, and of the overwhelming success of Germany, the article on FRANCE should be consulted.) Negotiations for the enlargement of the North German Confederation went on, the constitution of the old confederation being adopted without essential alteration; finally, on January 18th, 1871, the King of Prussia was proclaimed Emperor of Germany, and on March 21st the first Diet of the Empire met at Berlin. Since the close of the war the policy of the German Empire has been, with little exception, to isolate France and to hold the balance of power in Europe.—In 1872 the Tsar and the Emperor of Austria visited Berlin and concluded an alliance with Germany;

but upon the revival of the Eastern Question in 1875, Germany, in conjunction with other powers, was successful in checking the advance of Russia by setting aside the Treaty of San Stefano, between Russia and the Porte, and concluding in lieu the European concert embodied in the Berlin Treaty of 1878. Since her retirement from the German confederation Austria has received the consistent support of the German Empire, with a view of maintaining the civilising German influence over the South Slav states, in opposition to the Pan Slavist views of Russia—with whom, notwithstanding, she has preserved an unbroken amity. Of home politics the struggle between the State and the Roman Catholics was the chief feature. In 1872 also the Jesuits were expelled.—In 1873 the well known Falk Laws enacted that all clerical candidates should pass through a course of secular teaching at a university, every ecclesiastical appointment receive the sanction of the State, and a tribunal for ecclesiastical causes be established. These laws being pronounced to be invalid by the Pope, and disregarded by the Roman Catholics, refractory bishops were deposed, government contributions were withdrawn, and the religious orders dissolved and their property taken possession of by the State. After the close of the great war, the Social Democratic movement began to assume larger dimensions, so that although in 1877 but twelve candidates holding their views were elected, it was calculated that not less than one-tenth of the electorate were Socialists. Although the emperor was shot at, a bill for repression of Socialism was rejected by the Reichsrath. The emperor being again attacked and wounded, parliament was dissolved, and on its reassembling enormous powers were intrusted to the police, to expire in March 1881, and the obnoxious opinions apparently disappeared.—Between 1872 and 1875 a uniform imperial coinage and paper money was issued, and an imperial banking system established. In 1877 a supreme imperial tribunal was opened at Leipsic.—During 1879 an alliance with Austria for mutual defence was concluded. Bismarck broke with the National Liberal party and allied himself with a Clerical Conservative coalition; severe repressive measures against the socialists continued. A policy of protection, based chiefly on military reasons, was adopted by Parliament in July, the elections having resulted in a large increase in the conservative and ultramontane parties. Bismarck now parted with Falk and gave his influence in favour of the present Pope Leo, and against the ultramontanes, advocating the supremacy of the State over all creeds—his evident aim being to make use of all parties in turn, and to allow none to be predominant. In September he paid a visit to Vienna, to meet Andrassy, the Austrian Minister of Foreign Affairs, and met with an enthusiastic popular reception.—In 1880 the understanding entered into with the European powers in 1878 was maintained, some slight differences with Russia in the early part of the year being accommodated, and the alliance with Austria becoming closer. The Reichsrath passed a bill for the increase of the army with some alteration in detail. The anti-Socialistic laws were prolonged to March 1886. The Falk laws were modified, and it was enacted that the State ecclesiastical courts should have power only to prevent priests from performing divine service in Prussia, that dioceses from

which bishops had been expelled might, subject to the veto of the Minister of Public Worship, be administered by delegates who had not taken the oath of allegiance, and that new religious orders might be established with the leave and under the supervision of the State. A law against usury was also passed. On proposal in Reichsrath to exempt post-office orders from taxation, Prussia, Bavaria, and Saxony were outvoted by minor states; whereupon the Chancellor gave in his resignation, which the Emperor declined to accept, and the obnoxious resolution was accordingly rescinded. Hamburg and its territory, with the exception of a district which still remains a free port, entered the German Customs Union. The elections resulted in large loss to the National Liberal and Conservative parties, and corresponding increase in the Radical section. The close of this year and the beginning of the next were remarkable for the *Judenhetze* or anti-Jewish agitation.—In 1881 the Tobacco Monopoly Bill, authorising the Imperial Government to collect a revenue for itself in lieu of being dependent upon the contributions of the individual states, was rejected. A proposal for an Anglo-French occupation of Egypt was opposed, and the occupation by England alone was supported, on the ground that the joint occupation might lead to a war similar to that which followed the Austro-Prussian possession of Schleswig-Holstein.—In 1883 the Pope agreed that all ecclesiastical appointments should be notified to the State before being finally made, and the Prussian Parliament in consequence limited such obligation to the permanent appointment of ordained priests, and the exercise of spiritual functions was extended to all the sees in the kingdom, while questions as to ecclesiastical offices, appointment of teachers in church training colleges, and the exercise of rights in vacant sees, were transferred from the State Courts to the Minister of Public Worship. A verbal agreement was made between Germany, Austria, and Italy for mutual defence, to be of the same duration as the formal alliance between the two empires, and to expire in 1889. In the Reichsrath the Workmen's Insurance bill was passed, perhaps with an idea of conciliating the lower classes; but in consequence of the attempt on the Emperor's life at the unveiling of the Niederwald monument, in September, the anti-socialist law was further prolonged for two years, and an Explosives bill directed against the Socialists was also passed. The elections to the German Parliament resulted in a large increase of the Conservative party, the Socialists, however, increasing their force from ten to twenty-four.—In 1884 public attention was largely directed to the colonisation movement, the Chancellor speaking strongly in its favour. On the Congo question, his objection to the matter being settled by a treaty between England and Portugal was the cause of the meeting, in November, of a European conference on the subject. The relations between Great Britain and the Empire became somewhat strained, on the settlement at Angra Pequena, on the African coast near Cape Colony, being taken under German protection. The German flag was also hoisted on the northern coast of New Guinea, followed by the annexation of New Britain and New Ireland (see GERMAN COLONISATION). An agreement to maintain the *status quo* in Eastern Europe was

concluded at the meeting in September at Skierniewice, in Poland, of the Emperors of Germany, Austria, and Russia. Possession was taken of part of the north coast of New Guinea, of the Louisiade group, and Huan Bay, in March. The question of the Caroline Islands has been referred to in the article on SPAIN. A protectorate of part of the Zanzibar coast was (October 1885) established, subject to the rights of the Sultan of Zanzibar. Prince Albert of Prussia was elected as regent of the Grand Duchy of Brunswick on October 21st (the claim of the Duke of Cumberland), and a proposition to annex the Duchy to Prussia having been previously rejected, he was accordingly inaugurated on November 2nd. The elections to the Prussian Landtag took place on October 29th, with the following result:—Conservatives, 197; National Liberals, 70; Radicals, 45; Ultramontanes, 100; Poles, 15; Guelphs, 3; Danes, 2; being a transfer of 13 votes from the Radicals to the Conservatives. In the Reichstag of December 1st, on interpellation concerning the expulsion of non-Germans from Eastern Prussia, Bismarck read the Imperial message forbidding the discussion of the question on the ground that it concerned the sovereign rights of the King of Prussia. As Prussian Plenipotentiary he was bound to see that the efforts of Prussia to prevent further increase of Polish element should not be opposed by Imperial action. Protectorate proclaimed over the Marshall Isles on October 14th, 1885. A bill, giving a monopoly of the sale of spirits, which would allow the Empire to raise permanent revenue, and make every spirit seller an imperial, was introduced, and was strenuously opposed in the Reichstag. The proposal for constructing a canal of sufficient size to permit the passage of the largest vessels from the North Sea to the Baltic (see ENGINEERING, BALTIC CANAL) was approved by the Reichstag.—On Jan. 26th, 1886, the Reichstag declared that the expulsion of Poles (not being German subjects) from Prussia was unjustifiable and against the interests of Germany. The Federal Council, however, considered the resolution as an interference with Prussia, and therefore declined to notice it. On the 28th, in the Prussian Lower House, Bismarck said that as Prussia had failed to win Poland by kindness she could not consent to her restoration, and could therefore only increase the German element; and on the 29th a proposal to colonise the Polish provinces with Germans was adopted by 234 to 153. On Feb. 15th, in the Upper House, it was proposed to modify the May laws by allowing disciplinary powers to be exercised by other than German authorities, to abolish the ecclesiastical tribunal, to exempt candidates from the preliminary state examinations, etc. On March 22nd the ninetieth birthday of the Emperor was celebrated. 26th. Discussion in the Reichstag on the Spirits Monopoly Bill, the first two clauses of which, containing the essence of the bill, had been previously rejected by Committee, Prince Bismarck taking an active part in the debate. Bill ultimately rejected. 30th. Bill for prolonging the Anti-Socialist law for five years debated in the Reichstag. 31st. Committee of the Upper House rejected Bishop Kopp's amendment to the Ecclesiastical Bill, which involved essential modifications and rescinded its provisions with regard to appeal to the State.

Gerome, Jean Leon, French artist, b. at Vesoul, Haute Saône, 1824. Went to Paris in 1841, and entered the studio of Paul Delaroche, and studied at the Ecole des Beaux Arts. Remained under this artist till 1844, and accompanied him to Italy. Exhibited for the first time in Paris at the Salon in 1847; went on a tour to Turkey and the Danube in 1853, and to Upper and Lower Egypt in 1856. In 1863 appointed Professor of Painting in Ecole des Beaux Arts. Obtained a third-class medal in 1847, two second-class medals in 1848 and 1855, and the Cross of the Legion of Honour in the latter year; in 1865 nominated *membre de l'Institut*. At the Exposition Universelle of 1867, where his principal paintings since 1855 were exhibited, he obtained the *grande médaille*, and was nominated "Officier de la Légion d'Honneur." His visit to the East appears to have imported to him most vivid and correct impressions of various races in that region, as the Arabs, Turks, Albanians, Arabas, and Syrians, which have been reproduced in his paintings with great effect. His principal works since 1849 have been "The Virgin, Infant Jesus, and St. John," "Bacchus and Cupid," "Interior of a Greek Household," "Age of Augustus and Birth of Jesus Christ," "Rembrandt," "Portrait of Rachel," "The Plague at Marseilles," "Death of St. Jerome," "Lioness meeting a Jaguar," etc., etc. Among his ethnographic subjects are "The Turkish Prisoner and Butcher," "Prayer" (in the East), "Gate of the Mosque El Hacanyin," "Slave Market of Cairo," "Street-vendor in Cairo," "Promenade of the Harem," etc. He has also contributed some historic subjects, remarkable for the singularity of the conception and the striking effect of the execution.

Ghose, Mr. Lalmoohun, belongs to an old Hindu family in Viterumpore, East Bengal, his father being the late Namloohun Ghose, for many years chief native judge in different parts of Bengal; was b. 1849 at Kishnaghur, in Lower Bengal. Educated at Kishnaghur College, and subsequently came to England. After being called to the English bar, he returned to India and practised as an advocate in the Bengal High Court. Was the delegate of the Indian associations (see INDIAN DELEGATES) to the United Kingdom to protest against the policy of Lord Lytton's administration (1879-80). For the third time (1883) he was sent to England by his countrymen to support the policy of Lord Ripon, with special reference to the Ilbert Bill (*q.v.*). Was an unsuccessful candidate for Deptford in the recent election of 1885.

Gibb, Mr. Thomas Eccleston, M.P., was b. in Liverpool 1838. Many years connected with the *Liverpool Mercury*. Vestry clerk of St. Pancras. Returned in the Liberal interest as member for East St. Pancras (1885).

Gibraltar is of much importance to England, giving her a commanding situation at the entrance to the Mediterranean, and thus dispensing with the need of a large maritime force there. It is situated in the province of Andalusia, Spain, and its value as the "key to the Mediterranean" was recognised as early as A.D. 712, when it was held by the Saracens—from whom, however, it was again wrested by the Spaniards in 1333. After other vicissitudes, it was formally annexed by Spain in 1502, and remained in her hands until 1704, when Sir George Rooke, commanding a combined English

and Dutch fleet, took possession of it. From this date it has been in the hands of England, being formally ceded to us by the Treaty of Utrecht (1713). It has successfully sustained numerous sieges since—viz., in 1718, 1720, 1727, 1757, and notably in 1779-83, by the Spaniards and French combined, whom General Elliot (later Lord Heathfield), after a defence of unparalleled severity, eventually withstood. Gibraltar has a length of 3 m. and breadth of $\frac{1}{2}$ m., and its greatest height is nearly 1500 ft. Opposite to it, at a distance of $\frac{1}{2}$ m., is the Spanish town of Algeiras. Its anchorage is bad, and its bay (8 by 5 m.), is much exposed to the severe south-west winds. It is under a military governor (General Sir John Miller Aclay, G.C.B., R.A.). It is a free port, and over 4,000 steamers call there each year. In 1884 its revenue was £40,554; expenditure, £50,690; exports to United Kingdom, £22,820; imports from United Kingdom, £796,372; pop. (1885) 24,680. For a full account of the history of Gibraltar see Prescott's "Ferdinand and Isabella" (Sonnenschein).

Gibson, Mr. John George, M.P., of Dublin, was b. 1846. Educated at Trinity College, Dublin, taking the first two gold medals in classics, history, and political science. Called to the bar (1870), Queen's Counsel (1880), and appointed Her Majesty's Third Serjeant-at-Law (1885). Is Chancellor of the diocese of Killaloe. Returned in the Conservative interest as member for Walton Division, Liverpool (1885).

Giers, Nicholas Carlovitch de. Russian statesman and Minister for Foreign Affairs to the Emperor Alexander III., b. in 1820. He studied in the Imperial Lyceum, at Czarskoe Selo. In 1838 he was attached to the Asiatic Department in the office of the Ministry for Foreign Affairs. At twenty-one years of age he held a post in the consulate in Moldavia. In 1848 M. de Giers was attached as a diplomatist to the staff of General Lurders, when operating with an army in Transylvania. As a reward for his intelligence and activity he obtained the Fourth Class of the Order of St. Stanislas. In 1850 he became First Secretary to the Russian Embassy at Constantinople. He was appointed, in 1853, Director of the Chancery of the Commissary-Plenipotentiary in Moldavia and Wallachia. He was in the Ministry of Foreign Affairs during the Crimean war. In 1856 he was raised to the rank of a Councillor of State, and occupied the post of Consul-General in Egypt. He was subsequently Consul-General at Bucharest. From 1863 to 1869 he represented Russia in Teheran. From 1869 to 1872 he was sent as Russian Minister to Berne, when he became the representative of Russia at the court of Stockholm. In 1875 the post of Adjunct to the Minister for Foreign Affairs, and Director of the Asiatic Department was conferred upon him. In the years 1876-78 M. de Giers presided at the Foreign Office, a position he has since continued to fill.

Giffen, Mr. R. See TRADES UNION.

Gifford, Edric Frederick Gifford, V.C., 3rd Baron (creat. 1824); b. 1849; succeeded his father 1872. Served in the Ashantee and Zulu wars, and was presented with the Victoria Cross for bravery at the taking of Bequah; appointed Colonial Secretary for Western Australia, and senior member of the Legislative Council (1880-83).

Gilbert's Act. See PAUPERISM.

Gilchrist Educational Trust. A fund left by the late Dr. John Borthwick Gilchrist (1759-1841) to trustees, to be appropriated "for the benefit, advancement, and propagation of education and learning in every part of the world, as far as circumstances will permit." Dr. Gilchrist had been long in the service of the East India Company, and had made great efforts and incurred many sacrifices in extending the knowledge of the vernacular tongues of India. As a philanthropist he was unwearied; becoming an earnest supporter of the Anti-Slavery Association when over eighty years of age. The property of the Gilchrist Trust is mainly derived from two fortunate investments—the "Commercial Bank of Scotland" and the "Balmmain estate" in Sydney, New South Wales. This last, purchased for £17 10s. in 1801, has been so disposed of as to bring over £70,000 to the estate. The net income for 1885 is estimated at about £3,800; and the purposes to which it is applied are chiefly the award of scholarships to meritorious students in various parts of the world, to enable them to complete their higher education, and the organisation of high-class lectures, chiefly scientific, at nominal fees. The scholarships are awarded, as a rule, on the results of the examinations of the University of London; and awards have been made in most of the English colonies as well as at home. Some are specially reserved for female candidates taking a University education. The present official address of the Secretary of the Trust is No. 4, The Sanctuary, Westminster, S.W.

Giles, Mr. Alfred, M.P., C.E., was b. 1816. Chairman of the Union Steamship Company. Returned in the Conservative interest as member for Southampton (1878-80, 1883-85); re-elected 1885.

Gillhooley, Mr. James, M.P., of Bantry. Returned as a Nationalist for West Cork (1885).

Gill, Mr. Henry Joseph, M.P., was b. 1836. Educated at Trin. Coll., Dublin. Connected with the firm of M. H. Gill & Son, Dublin, publishers and wholesale booksellers. Returned as a Nationalist for Co. Westmeath (1880-83); Limerick City (1885).

Gill, Mr. Thomas Henry, M.P. He is connected with the *United Ireland* journal. Returned as a Nationalist for South Louth (1885).

Gillot, Mr. See ENGRAVING, AUTOMATIC.

Gillotage and Gilloteurs. See ENGRAVING, AUTOMATIC.

Gippaland. See VICTORIA.

Gipsies—so called from the belief that they originally came from Egypt—hence the word Egyptians, their name in the statutes, contracted to its present form "gipsies." In different countries they are known under various appellations, as in Spain, where they are designated *Gitano*; North Germany, *Tatern*; Germany, *Zigeuner*; France, *Bohémiens*, etc. Among themselves they are known as *Sinte* or *Romanitschawe*. The gipsies are considered by the philologists of the present day to be connected with the Indian branch of the Aryan family. Cp. *Sinte* with Sanscrit *Saindhavas* (dwellers on the Indus); their language contains also many Aryan roots. At a rough calculation in 1880 there were about 100,000 gipsies in Turkey, 10,000 in Bosnia, 25,000 in Servia, 250,000 in Roumania and Montenegro, 10,000 in Austria, 196,000 in Hungary, in Transylvania 79,000, in Spain 40,000, in France 5,000,

in Germany and Italy 34,000, in Russia and Poland 250,000, and in England 20,000. With some noble exceptions the gipsies follow most demoralising habits and customs. Idleness, ignorance, immorality, and dishonesty are the leading traits. They are strong and healthy, and the women and children, as a rule, are handsome and pretty. They have scarcely an idea of a God and religion. To improve the moral and social condition Mr. George Smith, of Coalville, has been working hard and long for very many years. He wants to bring, in an easy manner, education to the children, and sanitation to their homes, on the lines of the Canal Boats Act of 1877 and 1884, which are set forth in his Bill that he had before Parliament in 1884 and 1885, and with which the gipsies and van dwellers agree.

Girdlers, The Worshipful Company of See CITY GUILDS, THE.

Girdlestone, Canon Edward, b. 1815, educated at Balliol College, Oxford, where he graduated B.A. 1826, M.A. 1829. He entered holy orders in 1828, and held the following appointments: Deane, Lancashire (1830), Bristol (1855), Waple (1858), and Halberton (1862). In 1854 he was appointed Resident Canon of Bristol Cathedral. He was renowned as a theologian, author, and public speaker. Died Dec. 4th, 1884.

Glacial Drift. See GLACIAL PERIOD.

Glacial Period. The late Professor Agassiz was the first to draw attention, in the year 1840, to indications of former glacial action on the rocks of Scotland and North Wales. Subsequent observations have led to the conclusion that at a period comparatively late in geological history a great part of Britain must have been covered with ice and snow, much as Greenland is clothed at the present day. This period is known as the *Glacial Period*, or the *Great Ice Age*. Glaciers of enormous magnitude were shed from the Alps and Pyrenees, while the greater part of northern Europe and America was buried under a vast mass of continental ice. During part of the glacial period the land was submerged beneath Arctic waters, and in North Wales the submergence was carried to a depth of at least 1,300 feet. The effects of the old glaciers have been to round, polish, and scratch the rock over which the ice travelled; to transport angular blocks of stone great distances, and leave them, on thawing of the ice, scattered over the country as *erratics*; and to accumulate heaps of ice-borne detritus in the form of moraines. A great part of the country as far south as the Thames valley is covered with *boulder-clay* and other superficial deposits known as *glacial drift*. These are evidently connected with ice action; but while some geologists regard the boulder-clays as representing a "ground moraine," or sheet of detritus formed beneath land ice, others regard it rather as the accumulated droppings of melting icebergs. It is believed that the ice age was not an uninterrupted period of Arctic severity, but was ameliorated by one or more warm episodes or *interglacial periods*. The causes which led to the excessive lowering of temperature during the glacial period are not well understood. According to Dr. J. Croll the changes of climate were due to variations in the eccentricity of the earth's orbit. If at a period of great eccentricity the winter in the northern hemisphere occurred when the earth was in the aphelion of its orbit, the direct heat of the

on the earth would be one-fifth less during winter and one-fifth more during summer than at present; and these extreme changes are said to be sufficient to account indirectly for the phenomena of the glacial period. [For a detailed account of the glacial epoch, consult Professor J. Geikie's "Great Ice Age" (1877); and for a discussion of its probable causes, Dr. J. Croll's "Climate and Time" (1875).]

Gladstone, Mr. Herbert J., M.P., fourth son of the Rt. Hon. W. E. Gladstone, by Catherine, eldest daughter of the late Sir Stephen Richard Glynn, of Hawarden Castle, Flintshire. He was b. 1854. Educated at Eton, and graduated B.A. at University College, Oxford, taking (1876) a first-class in modern history. He was appointed private secretary to his father without salary (1880), a Lord of the Treasury (1881), and a Deputy Commissioner of the Board of Works (1885). Mr. Herbert Gladstone unsuccessfully contested Middlesex in 1880, was elected for Leeds (1880), and re-elected (1885) for West Leeds. Holds the office of Financial Secretary to the War Office (1886).

Gladstone, Dr. J. H. See SPELLING REFORM.
Gladstone, The Rt. Hon. William Ewart, M.P., P.C., statesman and man of letters, b. at Liverpool Dec. 29th, 1809. The son of a Liverpool corn merchant—Sir John Gladstone, M.P., sometime of Leith—and of Ann Robertson, daughter of Mr. Andrew Robertson, of Stormoway, and Provost of Dingwall, the greatest Liberal statesman of his time has ever been proud to boast of his Scottish nationality and middle-class origin. He was educated at Eton, and Christ Church, Oxford, and at both places early developed High Church tendencies, and those Tory principles he apparently inherited from his father; at school contributing largely to the *Eton Miscellany*, and subsequently taking an active part in the discussions of the Oxford Union. Shortly after the passing of the first Reform Bill, in 1832, Mr. Gladstone made his entry into public life at Newark, where he was elected, as the Duke of Newcastle's nominee, in the Tory interest, defeating Sergeant Wilde, the popular candidate. It was on May 17th, 1833, that he delivered his maiden speech in the House of Commons, in reply to Lord Howick, on the slavery question, when he expressed himself as opposed to slavery, but not in favour of hasty and wholesale enfranchisement. On the dissolution of the Melbourne ministry, at the end of 1834, Sir Robert Peel called Mr. Gladstone to his first public appointment as Junior Lord of the Treasury, which post he resigned in February of the following year for that of Under-Secretary for the Colonies. A month afterwards (March 1835), however, Lord John Russell introduced his motion with regard to the temporalities of the Irish Church, which Mr. Gladstone vigorously opposed; but the ministry were beaten and Lord Melbourne again came into power. The death of William IV., in June 1837, caused another general election, when Mr. Gladstone was once more returned for Newark. In 1841, on the accession of Sir Robert Peel, after the defeat of Lord John Russell in the House of Commons, Mr. Gladstone accepted office as Vice-President of the Board of Trade and Master of the Mint. He took an active part in the Corn Law debates of 1841-2, and although opposed to Mr. Villiers, the champion of the Repeal party, the revised

tariff scheme was said to be chiefly Mr. Gladstone's work. He became President of the Board of Trade in 1843; but at the commencement of 1845 he resigned, owing to his opposition to the extension of the Maynooth Grant and the establishment of non-sectarian colleges. In 1846, it having been announced that an immediate revision of the Corn Laws was pending, Sir Robert Peel resigned, finding that certain members of his government would not go with him; but Lord John Russell declining to form a cabinet, Sir Robert returned to office with Mr. Gladstone as Colonial Secretary, and member for Oxford University. On the death of Sir Robert Peel, in 1850, Mr. Gladstone paid his memorable visit to Naples, which laid the foundation of his future friendship with Cavour (*q.v.*) and Garibaldi. During this period he finally severed himself from the Tories, although holding aloof from the Liberals for a time; and in 1852 became Chancellor of the Exchequer in Lord Aberdeen's administration, but fell with the collapse of that cabinet after the Crimean war. Subsequently he was appointed by the Earl of Derby, Lord High Commissioner to the Ionian Islands. In 1859 he accepted the Chancellorship of the Exchequer in Lord Palmerston's Government. His budgets were always looked forward to with absorbing interest; but no little sensation was caused by that of 1861, which announced the total repeal of the much debated paper duty. On the dissolution of 1865, Mr. Gladstone was rejected at Oxford, but was returned for South Lancashire, receiving great ovations at Manchester and Liverpool. On the death of Lord Palmerston, in the autumn of that year, Earl Russell became Premier; his old foe, Mr. Gladstone, being the leader of the lower house. During the debates on the new Reform Bill a "cave" (see ADULLAMITES) was formed in the Commons, and the ministry fell in 1866, to be succeeded by the Earl of Derby's government, with Mr. Disraeli as leader in the Commons, who passed a Bill in 1867, by the operation known as "dishing the Whigs." It was in this year that Mr. Gladstone made his famous declaration in favour of disestablishing the Irish Church. In February 1868 Mr. Disraeli became Prime Minister, but parliament was dissolved in the following November, when Mr. Gladstone, rejected in South-West Lancashire, was elected for Greenwich. In the parliament of 1869 he became Premier for the first time, and thence up to the dissolution of 1874 a number of important measures were placed on the statute book. The Irish Church having been disestablished, and while Europe was distracted with the Franco-Prussian war, the Liberal Government carried the Elementary Education Act (*q.v.*), the Irish Land Act, the Abolishment of Purchase in the Army (by Royal warrant), the Act for abolishing University Tests, and the Ballot Act; but they were beaten on the Irish University Education Bill in 1873, and Mr. Disraeli returned to power in 1874. Mr. Gladstone then decided to resign the leadership of the Liberal party, but in 1875 aroused much public indignation by calling attention to the alleged horrors being perpetrated in Bulgaria by the Turks. In 1879 he made his first visit to Midlothian, and on the dissolution of 1880 issued his great Liberal manifesto, which was followed by the second Midlothian campaign

(*q.v.*) and his return for that constituency. For the second time Premier, with a Liberal majority in the House of Commons of fifty over the Conservatives and Home Rulers combined, with Mr. Disraeli as Lord Beaconsfield in the House of Lords, and Sir Stafford Northcote as his opponent in the Commons, Mr. Gladstone again succeeded in carrying many important Acts up to the dissolution of 1885. Amongst these are included the Employers' Liability Act, the second Irish Land Act, the Hares and Rabbits Act, a reform in the Land Laws, and chief of all, the third Reform Act and Redistribution Act (*q.v.*). After the dissolution of the autumn of 1885, Mr. Gladstone again came forward for Midlothian, and was re-elected by an enormous majority. On the fall of the Salisbury administration, January 26th, 1886, Mr. Gladstone was summoned by the Queen to again take office. He now holds as Premier the office of First Lord of the Treasury and Keeper of the Privy Seal. In consequence of a divergence of views between some of the leading members of the Liberal party and Mr. Gladstone with respect to his proposed Irish policy, several of his old colleagues, notably Lord Hartington and Sir H. James, did not join his cabinet.—Mr. Chamberlain and Mr. Trevelyan, who accepted office, resigning March 27th. Mr. Gladstone gave notice (29th) of his intention to introduce bills relating to the government and land of Ireland on the 8th and 15th of April respectively, which will probably meet with determined opposition from various sections of the House of Commons. During this busy public life of over fifty years (his political jubilee was celebrated in December 1882), Mr. Gladstone has made many valuable contributions to the literature of the country. He published a pamphlet on "*The State in its relations with the Church*," which reached a fourth edition in 1840; and another on "*Church Principles*," about the same time; "*Remarks upon Recent Commercial Legislation*," in 1845. Some years afterwards Mr. Gladstone published his remarkable "*Studies on Homer*," and in 1869 his "*Juventus Mundi*," followed by "*Homeric Synchronism*" in 1876, and the political pamphlet on "*Bulgarian Horrors*." Recently (1886) Mr. Gladstone's controversy with Professor Huxley on Science and Revelation in the *Nineteenth Century* has attracted considerable attention. In 1839 Mr. Gladstone married Miss Catherine Glynnne, daughter of Sir Stephen R. Glynnne, of Hawarden Castle, Flintshire (see Barnett Smith's "*Life of Gladstone*," etc.).

Glaisher, Mr. James. See BALLOONING.
Glasgow Agricultural College. See AGRICULTURAL COLLEGES.

Glasgow, George Frederick Boyle, 6th Earl of (creat. 1703); Baron Ross (1815), by which last title he holds his seat in the House of Lords; b. 1825; succeeded his half-brother 1869. M.P. for Bute (Feb. till July 1865); appointed Lord Clerk Register, Scotland (1879).

Glass-sellers, The Worshipful Company of. See CITY GUILDS, THE.

Glaziers, The Worshipful Company of. See CITY GUILDS, THE.

Glee. A vocal musical composition for solo voices (one to a part), or, in the case of some of Bishop's glees, for solo voices and chorus. Glees are more often for male voices than for mixed voices, and more often unaccompanied than accompanied. The style grew not so much

out of the madrigal as out of the solo anthem which came in with the Restoration, and cannot fairly be considered as formed till the eighteenth century. It was superseded in great measure by the part song soon after the death of its greatest professor, Samuel Webbe (1740-1816). Occasionally even yet a good glee is produced, and the freedom and variety which is not only permitted, but is a set feature of the glee, would seem to make it desirable that the style should be revived. Short solos, contrasted movements varying effects of time and key, a happy choice of original and diverse melodies, and strict conformity with the words, are the characteristics of the glee. The best writers are Webbe, Cooke, Danby, Horsley, Stevens, Stafford Smith, Mornington, Bishop, Spofforth, and Goss.

"**Globe, The.**" Established 1803, and subsequently incorporated *The Traveller*. It was started by the old Whig party, and always was recognised as an authority on political matters, its contributors including some who held high office in the State. It retained its Whiggism until 1866, when a new proprietary, recognising the changed times, made it an outspoken though independent Conservative organ, reducing its price from fourpence to twopence, and eventually to one penny. It is now a recognised evening journal of the Constitutional party, and enjoys a very large and influential circulation. Editor: Captain G. C. H. Armstrong.

Gloucester and Bristol (united 1856), **Right Rev. C. J. Ellicott, D.D.,** Bishop of, was b. 1819. Educated at St. John's Coll., Cambridge, where he graduated with distinction (1841); Fellow of St. John's (1844). Rector of Pilton (1848); resigned his benefice to prosecute his critical studies at Cambridge (1854); Professor of New Testament Exegesis at King's Coll., Lond. (1858); Dean of Exeter (1861); appointed Bishop of Gloucester (1863) by Lord Palmerston. Chairman of the Company of Revisers of the New Testament on the death of the late Bishop of Winchester. Bishop Ellicott holds high rank as a commentator, and has published commentaries on the Galatians and other Pauline Epistles, Hulsean Lecture (1860), "*Historical Lectures on the Life of our Lord*"; edited Cassell's "*Popular Commentary on the Bible*," and is the author of several other works.

Glover, Miss. See TONIC SOL-FA.

Glover, Sir John Hawley, G.C.M.G., b. 1825, was educated for the navy, which he entered in 1841, and served in various localities with distinction. In April 1863 he was administrator of the Government of Lagos, and afterwards Colonial Secretary till May 1864, and subsequently administrator of the Government until July 1872. He had received the thanks of the Secretary of State for Foreign Affairs and of the Secretary of State for War for services rendered on different occasions. He was special commissioner to the friendly native chiefs in the eastern districts of the protected territories of the Gold Coast. He engaged and defeated the Aboonah tribes in December 1873, and having left Mr. Goldsworthy in command, marched with 700 Houssas into Ashanti, and reached the ruins of Coomassie February 12th, 1874, for which services he was made G.C.M.G. In 1875 he was appointed Governor of Newfoundland, and more recently of the Leeward Islands. He died September 30th, 1885.

Glovers, The Worshipful Company of. See CITY GUILDS, THE.

Glyn, Hon. Pascoe Charles, M.P., the third son of the late Baron Wolverton, was b. 1833. Educated at Harrow and University College, Oxford, and is a partner in Glyn, Mills, Currie, and Co., bankers. Returned as member for East Dorset in the Liberal interest (1885).

Godfrey and Co. See SAMOA ISLANDS.

Goethe. See NATURAL SELECTION.

Gold and Silver Wyre Drawers, The Worshipful Company of. See CITY GUILDS, THE.

Gold, English. See MINING.

Gold Fields of South Africa. Gold was discovered in the northern districts of the Transvaal about 1868, by the travellers Carl Mauch and Edward Baines, who also found it in the regions to the north of the Limpopo. But the first results of digging were disappointing. Later (1872-3) gold was found at Maraba Town, Lydenberg, and elsewhere, towards the centre and east of the Transvaal. It is found in alluvial deposits, and has proved plentiful and of high quality, commanding £3 18s. per oz. Experts speak well of these fields, and believe that very rich deposits await discovery. Nuggets of several pounds weight have been found. All that is wanted to insure complete success seems to be the opening of the Delagoa Bay railway. A gold-field has recently been opened at Tati, in Southern Matabele-land, beyond the Limpopo, but the latest accounts of it are not favourable. The whole region between the Limpopo and Zambesi rivers, which is intersected by granitic ranges, appears to be more or less auriferous. From the beginning of the sixteenth century the Portuguese obtained gold from the natives of this country, and it is probable that Arabs had done so before them. The port of Sofala was the seat of the richest gold trade. Later, the Portuguese opened diggings themselves in the country of Manica, which were at one time worked on an extensive scale, but have now long been deserted. This region between the Limpopo and Zambesi was the site of the mythical empire of Monomotapa, around which hangs a veil of romance, as about the fabled El Dorado in America. A Portuguese expedition was organised for the conquest of Monomotapa in 1586, but there seems considerable doubt if it ever even landed in Africa. Mauch, and one or two later explorers, have found traces of ancient masonry inland of Sofala, extensive ruins, as well as evidences of old gold-workings. These are thought to belong to a period anterior to Portuguese settlement, and by some are alleged to be Phœnician. But they have not yet been examined by any competent archaeologist. Fantastic speculation has been indulged in respecting them. They have been regarded as the ancient Ophir, whence it is said that King Solomon, Hiram, king of Tyre, and the Queen of Sheba drew their gold. Since the Arabs conquered the coasts of these countries before the advent of the Portuguese, it is not unlikely they may have been the real builders and gold-diggers of "Monomotapa."

Goldsmid, Sir Julian, M.P., M.A. (Lond.), was b. 1838. Educated at Univ. Coll., London, of which he is a Fellow and Treasurer. Called to the bar at Lincoln's Inn (1864). Returned in the Liberal interest as member for Honiton (1866-68), Rochester (1870-80), South St. Pancras (1885).

Goldsmiths, The Worshipful Company of. See CITY GUILDS, THE.

Goldsworthy, Major-General Walter Tuckfield, M.P., was b. at Purbrook, Hants, 1837. Served as a volunteer in Oude during the Mutiny. In recognition of his services he was made cornet in the 8th Hussars. Afterwards joined the Abyssinian expedition as brigade-major of Cavalry. Returned in the Conservative interest as member for Hammersmith (1885).

Gonzales, General Manuel. President of the Confederate Republic of Mexico. The republic, which had so long been injured by civil wars, has, under his Presidency, entered upon a period of great prosperity, owing to his firmness, patriotism, and sound judgment. With a view to the development of the resources of the country, he has offered favourable conditions to foreigners, and encouraged them to settle there. The foreign element is chiefly represented by Italians and Germans. American railway companies are intersecting the land with railways, and have found in Mexico a very large outlet for railway stock manufacturers. Since President Gonzales has been in office, diplomatic and friendly relations, which had been so long interrupted with England, have been renewed, and Mexico has improved both politically and commercially.

Good Templar Order, The. The Independent Order of Good Templars is a temperance fraternity which originated in New York in 1851. In 1868 it was extended to England by **Joseph Malins**, who, by 1870, had instituted the Grand Lodge of England, from which the Order has spread round the world. It administers a pledge of lifelong abstinence from intoxicating beverages, and advocates the legal suppression of their common sale. It seeks to protect the abstinent and reclaim the inebriate. It admits both sexes to equal privileges and office. Only a small fee of sixpence or one shilling per quarter is exacted, as it is non-beneficiary in basis; but an auxiliary provident fund is allowable. It enrolls by a brief service, of a somewhat religious character, including scripture reading, counsel, singing, and prayer; and all meetings are opened and closed with prayer and praise. It consists of (1) local "subordinate" lodges, meeting weekly; (2) county "district" lodges, meeting quarterly; (3) national "grand" lodges, meeting annually; and an international "Right Worthy Grand Lodge." In 1876, when the Right Worthy Grand Lodge met in Kentucky, the British Grand Lodges seceded from the Americans owing to negro exclusion in the ex-slave states; and there have since been two Orders—one mainly American, and the other mainly British. The latter at once reorganised their supreme court as the "Right Worthy Grand Lodge of the World," which has since held sessions in England, Scotland, Ireland, Wales, United States, Canada, and Sweden. Its last session (1885) assembled in the parliament house at Stockholm, where it reported nearly 300,000 members, an increase of 20,000 since the preceding session. The other Right Worthy Grand Lodge, which always meets in America, claims a still larger membership, but its adult adherents in the United Kingdom are under 10,000, mostly in Ireland; while the Right Worthy Grand Lodge of the World has 127,000 adherents in the United Kingdom, of whom 80,000 are under its Grand Lodge of England, whose permanent offices are in Edmund Street, Congreve Street, Birmingham. The English organ is *The Good*

Templar's Watchword, 1d. weekly; and several local monthlies are issued, besides much literary matter from the Grand Lodge printing presses. This Grand Lodge has over 1,600 lodges, of which fifty are in the army and navy. The Grand Lodge meeting in Manchester Town Hall, Easter 1885, was attended by 1,450 representatives and officers; and 226 temperance sermons were preached on that Easter Sunday in Manchester and the neighbourhood. Although ordinary lodge meetings are confined to members, yet thousands of public meetings are held annually; while the rules, etc., of the Order are quite public. Most lodges publish programmes, showing that by addresses, debates, essays, music, recitals, and parties, the members mutually improve and entertain each other—their greatest festival being an intermittent Crystal Palace fête, when some 40,000 or 50,000 persons attend. There is also attached a **Juvenile Order**, enjoining abstinence from strong drink, tobacco, gambling, and profanity, and which has 50,000 English members, in 700 branches. The members have founded a **Temperance Orphanage** at Sunbury, at a cost of about £10,000. The Grand Lodge of Scotland has 630 adult and 260 junior branches; its office is 72, Great Clyde Street, Glasgow, and its monthly organ is *The Good Templar*. Ireland and Wales have 260 adult and junior branches, and publish English and Welsh organs. The Order issues twenty-five newspapers the world round; and the officers of the Right Worthy Grand Lodge of the World, installed at Stockholm, are residents of England, Ireland, Scotland, Wales, Channel Islands, Norway, Sweden, Denmark, Belgium, United States, Canada, and New Zealand.

Goodwood Cup and Meeting. See RACING.

Goodwood Stewards' Cup. See RACING.

Gooseberry Trees. See FRUIT FARMING.

Gordon Generator. See DYNAMO.

Gordon, Major-General Charles George, b. 1833, at Woolwich, was the fourth son of Lieut.-Gen. Henry William Gordon. Educated at the Royal Military Academy, Woolwich, he obtained a commission in the Royal Engineers. Served with distinction in the Crimean war, and at its close was specially attached to the Commission to define the new frontier of Bessarabia, and was similarly employed in Armenia. Special Commissioner to the Caucasus (1858); engaged in the Chinese war (1860). Took a responsible part as Chief Engineer against the Taepings (1862). Appointed by General Staveley at the request of Li-Hung-Chang, Gordon (now Major) assumed the command of the imperial forces, and by his energy and valour brought the war against the rebels to a successful conclusion. From this he obtained the *sobriquet* "Chinese Gordon." Returning to England (1864), was appointed chief engineer officer at Gravesend (1865-71). Became British Consul at Galatz (1871); volunteered (1873) for service in Egypt. Appointed by the Khedive, on the resignation of Sir Samuel Baker, Governor of the tribes on the Upper Nile, afterwards (1874-79) designated Governor-General of the Soudan (*q.v.*). Became private secretary to Lord Ripon (1880), a position he soon afterwards resigned. Invited by Li-Hung-Chang, he went to China from India (1881), where he assisted the Chinese Government by his advice in their dispute with Russia, and in the reorganisation of their army. Served as Governor-General of Mauritius, resigning the

post on his attaining the rank of Major-General. Assisted the Cape authorities in Basutoland. Accepted (1883) a command from the King of the Belgians to proceed to the Congo (*q.v.*), but in response to the appeal of the Liberal Government proceeded to Egypt (1884), to undertake the relief of the garrison of the Soudan. Defended Khartoum for nearly a year, it finally falling (January 26th, 1885), and he himself being killed. General Gordon was not only distinguished for his great bravery and patriotic self-denial, but also for his devoted philanthropy and high Christian character. Parliament has (1886) voted a statue, shortly to be erected, to his memory.

Gordon, Viscount. See ABERDEEN.

Gormanston, Jenico William Joseph Preston, 14th Visct. (creat. 1478); b. 1837; succeeded his father 1876; appointed Governor of Leeward Islands (1885).

Gorst, Sir John Eldon, K.B., Q.C., M.P., was b. 1835. Educated at St. John's Coll., Cambridge; graduated B.A., 3rd Wrangler (1857), M.A. (1860). Was Civil Commissioner of Waikato, New Zealand (1861-63). Called to the bar at the Inner Temple (1865); Q.C. (1875); Solicitor-General (1885-86). Contested Hastings unsuccessfully in the Conservative interest (1865), but sat for Cambridge (1865-68, when he was defeated), and has represented Chatham since Feb. 1875; re-elected 1885.

Goschen, Rt. Hon. George Joachim, M.P., P.C., was b. in London 1831. Educated at Rugby, under Dr. Tait, and at Oriel Coll., Oxford; but left without taking a degree, in consequence of his being unable to conform to the religious test then in force. He was returned without opposition as a Liberal for the City of London at a bye-election in 1863, and at the general election in 1865 was re-elected at the head of the poll. In the same year he was appointed Vice-President of the Board of Trade, and (1866) Chancellor of the Duchy of Lancaster. His tenure of that office, however, was only of brief duration, as Lord Russell's ministry retired in June of the same year. On Mr. Gladstone's accession to power, in 1868, Mr. Goschen became President of the Poor Law Board, and subsequently succeeded Mr. Childers as First Lord of the Admiralty. He was again returned for London in 1874, but only as the minority member, and in 1880 did not seek the suffrages of his old constituents, but accepted an invitation to stand for Ripon, which he represented until the late general election, when he was returned for one of the divisions of Edinburgh. On the elevation of Sir Henry Brand to the peerage, Mr. Goschen was offered the speakership of the House of Commons, but declined the honour on account of his defective eyesight. Mr. Goschen on several occasions has been unable from conscientious motives to move with his party, and broke from them on the question of the extension of the county franchise. He was dispatched by Lord Beaconsfield on a special mission to Egypt (*q.v.*) with reference to the financial difficulties of that country. He is the author of several financial and political pamphlets, and of the well-known work on "The Theory of Foreign Exchanges." Mr. Goschen stood prominently forward at the recent election (1885), as the exponent of Moderate Liberalism.

"Gosebet, Paul". See NOMS DE PLUME.

Gosford Archibald Brabazon Sparrow Acheson, K.P. (creat. 1806), 4th Earl of; Baron

Worlingham (1835), Baron Acheson (1847), by which last two titles he sits in the House of Lords; b. 1841; succeeded his father 1864.

Gossett, Sir R., late Serjeant-at-Arms in the House of Commons, d. Nov. 27th, 1885. He was in the service of the House for more than forty-nine years. In 1836 he was appointed Assistant-Serjeant; his father being then Serjeant-at-Arms; in 1854 promoted to be Deputy-Serjeant, and twenty-one years later attained the dignity of Serjeant-at-Arms.

Gosler, Herr von. See GERMAN POLITICAL PARTIES.

Gothenburg Licensing System, is one under which the public-house licenses are granted to a Company, which places managers at fixed salaries in the houses, and after paying the expenses of management, with 6 per cent. annual interest on the shareholders' capital, makes over the profits to the town treasury, to be used as the statutes may direct. The Company was formed on Oct. 1st, 1865, receiving the royal assent two months previously. No more licenses than are considered necessary are used by the Company, however many it may have in hand: thus in one year only twenty-three were used out of forty. All the houses being under the same management, the prices are kept higher than would otherwise be the case; and hot or cold food, according to demand, with tea, coffee, cocoa, and aerated waters, being also provided, it is by these means sought to lessen the consumption of liquor. The amount of drink sold in the Company's houses is steadily decreasing. No liquor is sold to persons under age, or already drunk, nor is it supplied to those who pay renewed visits to the public-house within short intervals for the purpose of drinking. The manager is only allowed to sell liquor from the Company's own stores, and in its own vessels, spirits being served solely in glasses holding two cubic inches, and which bear the Company's name. It will be remembered that the House of Lords in 1879 expressed itself in favour of the Gothenburg licensing system, which had also a supporter in the Rt. Hon. Joseph Chamberlain. The system is objected to by the English temperance party because of its necessarily making a town profit by the results of drink selling. ("Gothenburg System," and "Appendix," Dr. S. Wieselgren, Gothenburg.)

Gough, George Stephens Gough, 2nd Visct. (creat. 1840), b. 1816; succeeded his father 1869. The 1st Visct. commanded at the battles of Moodkee, Ferozeshah, and Sobraon (1845-6), and for his eminent services on these occasions was raised to the peerage.

Gough, Mr. John B., the distinguished temperance orator, was a native of England, having been b. (1817) at Sandgate, Kent. Sent at the age of twelve to the United States. When in New York he followed the calling of a bookbinder. Being addicted to intemperance, he, through the influence of an address, became a pledged abstainer. Devoted himself to the advocacy of temperance, and in a short time achieved a great reputation as an orator in the United States. Visited England 1853, 1857, and 1878-79. Has published numerous works, among others being his "Autobiography" (1846), "Social Responsibilities," "Sunlight and Shadow" (1881). Mr. Gough died at Philadelphia, February 17th, 1886.

Gounod, Charles, b. 1817. He was destined to music from his boyhood. When eighteen, he

entered the Conservatoire at Paris, and won the great "Rome" prize in 1839, entitling him to residence in Italy, where he worked hard at the finest early Italian church music. The consummate mastery of strict ecclesiastical writing, which he thus gained, forms the basis of all his work, sacred and secular. After writing some operas, on his return to France Gounod became the conductor of the Paris division of the *Opheonists*. His successful opera of "Faust" (1859) placed Gounod at the head of operatic composers. Other operas followed, among which we may mention the charming "Mireille" (1864), "Romeo et Cinq Mars" (1877), and "Polyeucte" (1878). Besides his male-voice masses, Gounod has written a splendid "Messe Solennelle"; a fine motet, commemorating the grief of France in 1870, called "Gallia," and other choral works universally popular. His songs, especially "Nazareth," "There is a green hill far away," and "Serenade" (Victor Hugo), are well known. In 1882 Gounod struck fresh ground with his grand oratorio of the "Redemption," written for the Birmingham Festival, followed in 1885 by "Mors et Vita." Her Majesty the Queen has recently (March 1886) honoured M. Gounod by attending a special performance of "Mors et Vita" at the Albert Hall.

Gourley, Mr. Edward Temperley, M.P., F.R.G.S., was b. 1828 at Sunderland. Is a shipowner and alderman of the borough, a J.P. and Deputy Lieutenant for Durham, and J.P. for Sunderland, of which he has been Mayor three times (1864-65-66). Returned in the Liberal interest as member for Sunderland (1868-85); re-elected 1885.

Grafton, Augustus Charles Lennox Fitz-Roy, 7th Duke of (creat. 1675); b. 1821; succeeded his brother 1882. Served in Crimean campaign, where he was severely wounded; Equerry to the Queen (1849-82), when he was appointed Hon. Equerry.

Grafton, Mr. Frederick William, M.P., of Heysham Hall, Lancaster, and Hope Hall, Manchester, was b. 1825. Mr. Grafton is J.P. of Lancaster. Returned in the Liberal interest as member for North-East Lancashire (1880-85); Accrington Division (1885).

Graham, Earl. See MONTROSE.

Granard, George Arthur Hastings Forbes, 7th Earl of (creat. 1684), b. 1833; succeeded his grandfather 1837.

Grand Committee. "Since 1832," says Sir P. E. May in his "Parliamentary Practice" (p. 443, ed. 9, 1883), "the annual appointment of the ancient Grand Committees for Religion, for Grievances, for Courts of Justice, and for Trade, has been discontinued. They had long since fallen into disuse, and served only to mark the ample jurisdiction of the Commons in Parliament. When they were accustomed to sit they were, in fact, constituted like committees of the whole House, but sat at times when the House itself was not sitting." In 1882 the pressure of public business induced the House of Commons to revive the Grand Committees in a new shape. By Standing Orders of December 1st, 1882, two standing committees were appointed to consider—the one all bills relating to law and courts of justice; the other, all bills relating to trade, shipping, or manufactures; the procedure to be that of select committees—the public, however, not being excluded; the committees not to sit whilst the

House is sitting unless by order of the House; twenty members to form a quorum; the number of each committee to be not less than sixty or more than eighty members, to be nominated by a committee of selection, regard being had to the classes of bills committee'd, the composition of the House, and the qualifications of the members selected; the chairman's panel, of not less than four nor more than six members, to be nominated by the same committee of selection, and to appoint from among themselves the chairman, three being a quorum for that purpose. A bill which had been committed to one of these standing committees was when reported to the House to have been proceeded with as if it had been reported from a committee of the whole House. The above standing orders were to remain in force until the end of the session 1883; and under them the committees began to sit in April 1883. They did not prove quite so expeditious as had been hoped.

Grand National. See RACING.

Grant, Sir George Macpherson, M.P., was b. 1839. Educated at Christ Church, Oxford, where he graduated B.A. Deputy Lieutenant of Banffshire (1860), of Inverness-shire (1861). Returned in the Liberal interest for Elgin and Nairn (1870-85); re-elected 1885.

Grant, Ulysses Simpson, b. 1822 at Mount Pleasant, Ohio. He died at Mount McGregor, near Saragota, New York, July 23rd, 1885. His father was of Scottish descent. At an early age Grant evinced strong military proclivities, and on the nomination of one of the members of Congress of his native State, he was appointed to a cadetship at the West Point Military Academy, from which he received a commission as second lieutenant of infantry in 1842. He served with distinction under General Scott and General Taylor in the campaigns in Mexico. Afterwards he was employed on frontier duty in Oregon. In 1854 he was promoted to the rank of captain, and shortly afterwards resigned his commission. He took to farming in the neighbourhood of St. Louis; from there he removed to Galena, Illinois, and joined his father in the leather and wood trade. When the Civil War broke out, Grant was appointed aide-de-camp to the Governor of Illinois, and afterwards colonel of the 1st Illinois Volunteers. When in command of this regiment, he was engaged for a short time in suppressing Jay Hawking in Missouri. On his return to St. Louis he was intrusted with the command of a small expedition to Belmont. He was promoted to the rank of brigadier-general, and was placed in command of Cairo, from which place he moved against Forts Henry and Donaldson, which he captured (April 7th, 1862); he also defeated General Beauregard at Shiloh. He next commanded the right wing of the army advancing on Corinth. His operations led to the surrender of Vicksburg, and opened up Georgia to the Federals. In 1864, President Lincoln appointed him commander-in-chief of the armies of the United States, with the rank of lieutenant-general. He reorganised the army of the Potomac, and marched against General Lee, whom, after several encounters, he drove within the lines of Richmond and Petersburg. Sherman co-operated with Grant, and the operations of Sheridan having proved successful, Lee surrendered on the 9th April, 1865, at Appomattox Court House. In 1866 General Grant was created full general, and under the Johnson administration he acted as Secretary of State

for War. Two years later he was elected President of the United States, and was re-elected in 1872. In 1877 General Grant set out on a tour of the world, which lasted until the spring of 1880. He was everywhere received with the greatest consideration and distinction, due to the high military and civil positions he had held. General Grant's last days were embittered by severe financial losses, the consequent anxiety of which shortened his life. His "Autobiography," completed during his last illness, has recently been published in America, where it has had an enormous sale.

Grantham, Hon. Sir W., K.B., was b. 1835. Educated at King's Coll. Sch. Called to the bar (1863); Q.C. (1877); Bench of the Inner Temple (1880). J.P. for Sussex, and Deputy Chairman of Magistrates. Returned in the Conservative interest as member for East Surrey (1874-85); Croydon (1885), which seat he vacated on being elected to the Judicial Bench (January 1886).

Grantley, John Richard Brinsley Norton, 6th Baron (creat. 1782); b. 1855; succeeded his father 1877. The 1st peer was Speaker of the House of Commons.

Granville, George Leveson-Gower, K.G., P.C., and Earl (creat. 1833); b. 1815. Educated at Eton and Oxford, graduating (1834). Entered the public service as attaché to the British Embassy at Paris, at which his father, 1st Earl Granville, was the head. Elected to parliament for Morpeth (1836), and afterwards for Lichfield. Appointed (1840) Under-Secretary of State for Foreign Affairs. He attached himself from the beginning with great zeal to the Liberal party. In 1846 he succeeded to the peerage. He was appointed vice-president of the Board of Trade in 1848, and he succeeded Lord Palmerston as Secretary of State for Foreign Affairs (1851). During this last year he took an active part in connection with the Hyde Park Exhibition as vice-president of the Royal Commission, which led to his being nominated chairman of the Exhibition of 1862. He held successively the offices of Master of the Buckhounds, Paymaster-General of the Forces, Chancellor of the Duchy of Lancaster, Treasurer of the Navy, and President of the Council, and became ministerial leader of the House of Lords in 1855. In 1856 he was dispatched to St. Petersburg to represent the British Crown at the coronation of the Cz. Alexander. When Lord Palmerston formed ministry, in 1859, Lord Granville was appointed President of the Council, and in 1865 he was nominated Lord Warden of the Cinque Ports. In 1868 he became Secretary for the Colonies in Mr. Gladstone's first administration, and finally succeeded Lord Clarendon as Secretary for Foreign Affairs, holding this office until his retirement of the Liberal ministry, in 1871. Upon the fall of Lord Beaconsfield's Government, in 1880, and Mr. Gladstone's accession again to office, Lord Granville resumed office a second time as Secretary for Foreign Affairs, retaining this post until Lord Salisbury came into power, 1885. In the present Gladstone administration he holds office as Secretary of State for the Colonies (Feb. 1886).

"Graphic, The," founded 1869, by Mr. M. J. Thomas, its present editor, is an illustrated weekly of high-class character, and treats of current events. Its Christmas and Summer numbers are especially excellent, and have very wide circulation.

Gray, Mr. Edmund Dwyer, M.P., was b. 1845. Proprietor of the *Freeman's Journal* and *Morning Post*, Belfast. Lord Mayor of Dublin (1880); High Sheriff of the city (1882). Returned as a Nationalist for Tipperary (1877-80), Carlow County (1880-85); re-elected for Carlow and the St. Stephen's Green Division of Dublin City (1885), and elected to sit for the latter.

Great Britain. The United Kingdom of Great Britain and Ireland is under the rule of Victoria, of the House of Hanover, the oldest royal family in Europe. She holds the crown by inheritance and election, the right of election admittedly belonging to parliament, but being in practice always exercised in favour of some member of the royal house, with the exception of Henry VII. (whose title was tainted by illegitimacy) and Cromwell, the nominee of the army. The executive power, nominally vested in the sovereign, is in practice confided to ministers nominated by the majority of the House of Commons. The legislative authority belongs to the Queen and Parliament, consisting of the House of Lords and the House of Commons. The former is composed (1) of hereditary peers of the United Kingdom nominated by the Crown, (2) of English bishops, who sit *ex officio*, (3) of Irish hereditary peers, elected for life, (4) of Scotch peers, elected for the duration of parliament. There are at present 476 peers of the United Kingdom, 24 bishops, 28 Irish and 16 Scotch peers. The House of Lords is also the highest judicial court, but in practice exercises its authority through a committee of experts. The House of Commons is composed of 670 members—viz., 495 for England and Wales, 103 for Ireland, and 72 for Scotland—elected by secret ballot in boroughs and counties, by electors possessing household or lodger or service franchise, or occupying freehold of 40s., etc. The universities are also represented. Members must be twenty-one years of age. Ministers of the Churches of England, Scotland, and Rome, English and Scotch peers, government contractors, sheriffs, and returning officers of the districts for which they act, are disqualified from serving as members. Irish peers not in the House of Lords are eligible. The powers of parliament extend to the United Kingdom, its colonies and dependencies, and to all matters, ecclesiastical and temporal. It is also the highest court of law.—The state religion in England and Wales is Episcopal Protestant, the fundamental doctrine and practice of which is embodied in the Thirty-nine Articles and Prayer-book, and confirmed by parliament. All other religions are tolerated, and no civil disabilities attach to any British subject. There are 2 archbishops and 33 bishops; each of the former is assisted in the government of his "province" by a "convocation," consisting of bishops, archdeacons, and deans in person, and representatives of the inferior clergy. The sanction of the Crown is required for their meeting and deliberation, and to give binding effects to their resolutions. About half the population belongs to the Establishment, the remainder to the Roman Catholic Church and to various other denominations (about 180 in number), the most important of which are the Wesleyan and other Methodists, Congregationalists or Independents, Baptists, Presbyterians, Unitarians, Society of Friends, Jews, etc. (for each of which see under its respective heading). In Scotland the state

religion is Presbyterian, all others being tolerated. All the clergy are equal. A "kirk session" of "elders," under the presidency of the minister, manages the spiritual affairs of each parish; and a "general assembly" of clerical and lay representatives meet annually as the supreme court of the Church. The orthodox dissenters have similar organisations. There are also other denominations, as in England. In Ireland there is no state religion. Of the inhabitants about four-fifths are Roman Catholics; of the remainder about half belong to the Episcopal and the remainder to other denominations, chiefly Presbyterian.—Of late years great attention has been paid to elementary education in the United Kingdom. It is compulsory, and is afforded by local and voluntary schools under state control, supported by local funds, voluntary subscriptions, and state grants. Middle-class education is left to private enterprise, and higher education to the universities and to teaching and examining bodies approved by the state.—The area of the United Kingdom, including the adjacent islands, is 121,469 sq. miles, with a pop. in 1881 of 36,544,890 (see BRITISH EMPIRE (APPENDIX)).—The colonies and dependencies include the empire of India, the dominion of Canada, Australasia, South Africa, numerous colonies in the West Indies, West Africa, Guiana, Mauritius, Hong Kong, Gibraltar, Malta, etc.—The revenue for the year ending March 31st, 1885, amounted to £88,063,055; obtained (1) by indirect taxation, viz., custom and excise duties, about £47,000,000, and stamps about £12,500,000; (2) by direct taxation, i.e., income and other taxes, nearly £12,000,000; (3) by postal and telegraphic services more than £9,500,000—the balance being furnished by miscellaneous returns, such as interest on advances, Crown lands, etc. The expenditure at the same date amounted to £89,192,616: viz., charge for debt, about £29,500,000; army and navy, about £30,500,000; and the balance on civil list and other expenses, educational, judicial, civil, etc. The national debt amounts to £640,631,000. A revenue in rates and tolls to the amount of more than £40,000,000 is also expended in local objects, such as the maintenance of the poor, roads, bridges, harbours, etc.—The regular army, in March 1885, exceeded 180,000, about half of which was stationed in and paid by India and the colonies. There is also an army reserve, about 44,000 strong, available for active service abroad; and for home defence 108,000 militia, 11,000 yeomanry cavalry, and 209,000 volunteers. India maintains also a native army of about 125,000 men. Most of the colonies have also raised considerable local forces. The navy consists of 53 ironclad vessels complete and 10 building, and 530 other vessels. There are also two ironclads stationed permanently—one at Bombay and one at Melbourne—and a few small vessels for police and revenue duty in the colonies.—This country is chiefly remarkable for its enormous manufacturing and shipping industry. The imports in 1884 were £390,018,569; the exports, £295,967,583; excess of imports retained over exports of British produce, £94,052,000.—In February 1874 the result of the general election was to place the Conservative party, under the leadership of Lord Beaconsfield, in possession of power. Little worthy of note occurred until November 1875, when the purchase of the Suez Canal shares

from the Khedive became the point of departure of the policy which resulted in the occupation of Egypt (for details of events see EGYPT). In May 1876 the Queen was proclaimed Empress of India under the Royal Titles Act of 1876. In August, the state of anarchy in the Balkan Peninsula attracted public attention, and an intention imputed to the Government of intervention in support of the Ottoman Empire was frustrated by the publication of Mr. Gladstone's "Horrors in Bulgaria," and by the agitation consequent thereon, and on the breaking out of war, in April 1877, between Russia and Turkey, a proclamation of neutrality was issued; but in May a resolution submitted to parliament by Mr. Gladstone, declaring that the Porte had by its conduct towards its subject populations forfeited all claim to the support of England, was rejected by a large majority, and in July, on the advance of the Russians into Bulgaria, the British fleet was sent to Besika Bay. In January 1878 a vote of £6,000,000 for additions to the military and naval force was demanded, previous to entering into conference with the Powers; and upon the Russian advance towards Constantinople becoming known the vote passed without opposition, on February 8th. On February 13th the British fleet passed the Dardanelles without the permission of the Porte, and advanced to Constantinople, ostensibly for the protection of national interests. In view of the warlike policy of the ministry, Lord Derby, the Foreign Secretary, on March 28th, resigned in favour of Lord Salisbury. On April 2nd the reserves were called out, and a Foreign Office circular condemning the San Stefano treaty was issued. On the 17th an army corps and a contingent of Indian troops were sent to Malta, in spite of strong protests on constitutional grounds from Mr. Gladstone and the Liberal party. After long negotiations a conference of the Powers met at Berlin (see BERLIN CONGRESS), from which the treaty of that name resulted. A few days before its signature a secret convention (see SECRET CONVENTION) was signed, on June 4th, by which England agreed to defend the Porte, which on its side engaged to reform its internal administration and to cede the island of Cyprus.—In September, Shere Ali, the Ameer of Afghanistan, having refused to discuss a treaty made by him with Russia, or to receive a British Resident, an army occupied his capital. He fled to Balkh, where he died in the following February. Yakoob Khan was then recognised as Ameer, on condition that, in exchange for a subsidy, the Khyber and Karam passes should be occupied by the British, and a Resident sent to Kabul. The troops were accordingly withdrawn, and Sir L. Cavagnari installed as Resident; but in September he and his escort were put to the sword by the insurgent Afghans. General Roberts then occupied Kabul, deposed the Ameer, and executed several of the murderers. The enemy being largely reinforced, Roberts evacuated the city on December 14th, and concentrated his troops in the neighbouring Sherpur cantonments. On the 23rd the Afghans were defeated with great loss, and Cabul reoccupied on the 26th, the enemy dispersing. Musa, son of Yakoob, who had claimed the amership, seized Ghuznee on January 10th, 1880, but meeting with little support, soon afterwards submitted. In April, Shere Ali, cousin of the late Ameer, was appointed Governor of Candahar,

and a brigade sent to his support. In July Ayooob Khan, Governor of Herat, another son of the late Ameer, moved upon Candahar, and being joined by Shere Ali's revolted troops, repelled the attack of General Burrows' force on July 27th, and shut it up in the citadel. On September 1st, however, he was completely routed by General Roberts from Cabul, and fled to Herat. In the mean time Abdur Rahman, a nephew and defeated rival of Ameer Shere Ali, appeared early in 1880 in Afghanistan. Being well received, he advanced to Cabul, and on July 22nd, after some negotiation with the chiefs, he was recognised by the British and proclaimed Ameer; the foreign troops were withdrawn, and, after defeating Ayooob (who had repossessed himself of Candahar on the departure of the British) and expelling him from the latter place, and Herat, he was quietly accepted as ruler of the whole country.—In July 1878 Cetewayo, King of the Zulus, refused to deliver up the leaders of a raid into the territory of Natal, although he offered to pay a fine in satisfaction of the damage. The amends not being deemed sufficient, Lord Chelmsford with an army entered Zululand on January 11th, 1879. On the 22nd the British camp was, in the absence of the main army, surprised, and the defending force, after a desperate resistance, perished almost to a man. But for the heroic defence of the post of Rorke's drift, which guarded the line of retreat, the whole army would probably have been cut off. The troops were necessarily withdrawn into Natal, leaving Colonel Pearson besieged in Echowe. After several engagements with various success the Zulus were decisively defeated at Ulundi on July 4th. During this campaign Louis Napoleon, the ex-Prince Imperial of France, who was serving as a volunteer, was killed at the outposts. King Cetewayo was captured soon afterwards, and eventually sent to England; the country was divided into thirteen independent districts, each under its own chief. This arrangement not being found to secure peace to the country, the king was restored in January 1883, but being unable to maintain order he gave himself up to the Natal authorities in October. After an unsuccessful attempt to put himself again at the head of the nation, he died of heart disease in February 1884.—At the close of 1879, owing to inclement seasons and depression of trade, considerable distress was noticed in Ireland, and an agitation in favour of Home Rule (*q.v.*), thereupon sprang up. The ministry, therefore, for reasons expressed in a well-known letter from Lord Beaconsfield to the Duke of Marlborough, determined to appeal to the country; and after passing the budget and the army and navy estimates, and bringing in only to drop Mr. Cross's Water Bill, parliament was dissolved on March 19th, 1880. The result of the elections was somewhat unexpected. The House elected in 1874 contained 351 Conservatives, 250 Liberals, and 51 Home Rulers; while that of 1880 was composed of 349 Liberals, 243 Conservatives, and 60 Home Rulers. The ministry at once resigned, without waiting for the assembling of parliament, and were succeeded by a cabinet under the leadership of Mr. Gladstone.—On the occasion of the meeting of the House for the swearing-in of members, Mr. C. Bradlaugh (*q.v.*), junior representative of Northampton, claimed to make an affirmation in lieu of the oath of allegiance. His claim being negatived by the House on May 21st,

he offered to take the oath, saying that if in doing his duty to his constituents he had to submit to a form to him less solemn than the affirmation, so much the worse for those who forced him to repeat words of no definite meaning. This was objected to, on the ground that an atheist cannot take an oath which has no binding effect *per se* upon his mind. The Government recommended that he be allowed to affirm, but were defeated; and on May 23rd he claimed the oath, and refusing to obey the resolution, was removed in custody. He was released next day, and a resolution passed allowing affirmation subject to statutory liability to penalty for sitting without proper qualifications.—The Peace Preservation (Ireland) Act was not renewed, and a Compensation for Disturbance Bill, authorising the land courts in Ireland to award compensation to tenants in all cases of eviction, was carried through the Lower House, but was rejected by the Peers on August 3rd. The duty on malt was repealed, and one on beer substituted. An Act giving occupiers the right to kill ground game concurrently with the owner; the Employers' Liability Act, giving workmen compensation in cases of accident arising from defects in machinery, neglect of employer, foremen, etc.; and a Burials Act, formed the chief features of the session, among which must also be reckoned the rise of the well-known "Fourth Party" (*q.v.*). During the autumn the Land League (*q.v.*) in Ireland was established, and the Home Rule party reorganised with much skill by Mr. Parnell (*q.v.*), who shortly afterwards assumed the actual leadership. Agrarian crimes became alarmingly frequent, the principal of which was the murder of Lord Mountmorris in September. Captain Boycott, a landowner and agent in Mayo, was "boycotted," his neighbours declining under pressure of local opinion to visit him, the tradesmen to serve him, and his servants and labourers to work for him. His crops were ultimately secured by a number of Orange sympathisers, under the protection of the military. This system became general; and obnoxious persons were unable to sell or export their produce, or even to obtain the necessities of life. A prosecution was instituted against Mr. Parnell and thirteen others, but abandoned, as no jury could be relied upon to convict them. A complete reign of terror now set in, and Mr. Parnell and the League were supreme in Ireland. On the meeting of parliament the introduction of a Coercion Bill was met by the Home Rule party with every species of obstruction, the House on February 2d sitting continually for no less than forty-one hours, the debate being at last closed by the interposition of the Speaker, and leave given to bring in the Bill. On the 3rd the Premier, while moving a resolution embodying rules for "urgency," was interrupted by thirty-six Home Rulers, who were in succession suspended and removed by order of the Speaker, after which the resolution passed. The Coercion Bill was then proceeded with, and by aid of the new Clôture rule passed the Commons on February 24th, and became law on March 2nd. An Arms Bill, pressed on in a similar manner, received the royal assent on March 21st. On April 7th a Land Bill (embodying the three "F.s," viz., fair rent, fixity of tenure, and free sale, establishing a court to fix rents and a land commission to make advances from Church funds to enable tenants to

acquire the freehold) was introduced, and in spite of the combined opposition of the Home Rule and Tory parties, was sent up to the Lords on July 30th. The Upper House attempted to make great changes in the principles of the measure, but after a conference with the Lower House finally yielded, and the Bill became law on August 22nd. On April 10th Lord Beaconsfield died, at the age of 76 (see BEACONSFIELD, EARL OF).—Mr. Bradlaugh having been convicted in penalties for sitting without taking the oath, his seat was declared vacant. Being re-elected, on April 26th he vainly attempted to be sworn, and was again removed, and subsequently excluded from the precincts of the House. On August 2nd he attempted to obtain admittance by force, but was expelled by the police—his application for a summons for assault being refused on the ground that the assault, being committed within the limits of the House, was privileged.—Measures of reform in the army and navy, and a modest budget, were the only remaining features of importance in this session. (With respect to the new frontiers of Greece, the occupation of Tunis by France, and the negotiations on the Anglo-French Commercial Treaty, see articles GREECE and FRANCE).—In the beginning of 1881 the inhabitants of the former Transvaal Republic (see TRANSVAAL), which had been annexed to the British Crown, rose in revolt and besieged the British in the capital, Pretoria. Sir George Colley moved forward to its relief, but on January 28th was repulsed with great loss by the Boers at Laing's Nek. On February 26th a renewed attack at Majuba Hill was defeated, and the General was slain. On March 22nd the war was concluded by a convention under which the royal authority over the Transvaal was acknowledged, and a Resident placed in the capital, self-government being conceded.—During the recess the Government arrested Mr. Parnell and the officials of the League under their extraordinary powers. The prisoners having issued an address calling on the tenants to pay no rent while their leaders were in gaol, the League was declared to be an unlawful body, and promptly suppressed. The effect of this course was to substitute the terrorism of secret societies for that of the League, and the agitation and disturbance continued to increase. In view, therefore, of the ill success of their attempts to restore order, Lord Cowper and Mr. Forster, the Lord Lieutenant and Chief Secretary, resigned their offices on April 28th, 1882, Lord Spencer and Lord Frederick Cavendish being respectively appointed in their stead. Mr. Parnell and his fellow-prisoners were released, really because no advantage was to be obtained by their further detention, but according to the imaginary Kilmainham Treaty (*q.v.*) in the hope that they would cease from opposition if their wishes in regard to future legislation were consulted. On May 6th Lord F. Cavendish, the Chief Secretary, and Mr. Burke, the Permanent Under-Secretary, were assassinated in the Phoenix Park, Dublin, the murderers escaping and apparently leaving no trace. Mr. Trevelyan was appointed Chief Secretary. On the 11th inst. the Prevention of Crimes Bill was brought in, together with an Arrears Bill for the relief of impoverished tenants. During the progress of the former the Home Rulers renewed their obstructive tactics, one sitting (on June 30th) lasting over thirty hours, and in

spite of the new rules of urgency it did not pass the Lower House until July 7th, receiving the royal assent on the 12th. The Arrears Bill was sent up on the 21st, and returned by the Lords on August 1st, but after some discussion finally became law on the 18th.—Mr. Bradlaugh having been previously refused the oath and removed, on February 21st administered the oath to himself, and took his seat. On the next day he was again declared to be expelled.—Resolutions as to conduct of public business were brought in, but after much debate were adjourned to an autumn session on October 24th, and after six weeks' discussion were adopted. The budget was chiefly remarkable for the decline in the drink revenue, owing partly to the diminished wages and partly to the improved habits of the working classes. The Electric Lighting Acts, the Parcels Post Act, and the Married Women's Property Act (placing married women on an equal footing with men before the law), were the principal statutes worthy of note. The intervention in Egypt rendered necessary the voting of supplementary credits.—The reign of terror of the Irish secret societies continued during the autumn, among the numerous outrages committed, apparently with impunity, being the atrocious murder of the Joyce family at Maamtrasna; but by the beginning of 1883 the firmness of Lord Spencer's government produced greater tranquillity, and as the year went on agrarian crime had everywhere diminished, and the law had been upheld. The Irish irreconcilables now adopted dynamite, and an unsuccessful attempt was made on March 15th to blow up the offices of the Local Government Board in London. On April 5th Dr. Gallagher and several others were arrested at Birmingham in the act of manufacturing nitro-glycerine and dynamite, and on June 14th, after four days' trial, he and three of his accomplices were sentenced to penal servitude for life. In the meantime the authorities had succeeded in arresting the perpetrators of the Phoenix Park crime, and in April brought them to trial, when five were executed, two sentenced to penal servitude for life, and others to shorter sentences. The informer, Carey, being sent out of the country for safety, was killed at the Cape of Good Hope, in July, by another Irish patriot.—In parliament, Mr. Chamberlain, the President of the Board of Trade, brought forward bills to amend the law of bankruptcy and the law of patents, both of which were referred to the Grand Committee on Trade, and subsequently, when passed into law, reflected great credit upon their author. In consequence of the discovery of Dr. Gallagher's nitro-glycerine manufactory, an Explosives Bill was brought in on April 9th, passed both Houses on the same evening, and received the royal assent on the following day. Mr. Childers, the Chancellor of the Exchequer, made his financial statement, showing a surplus of nearly £2,000,000 after providing for the Egyptian expedition out of revenue, and in spite of the diminished return from the drink duties. He proposed for the coming year to reduce the income-tax and to remit a portion of the railway duties. He also proposed, by issuing new terminable annuities (making use for this purpose of the Chancery and Savings Bank Funds), to extinguish at once £70,000,000, and ultimately £172,000,000, of the national debt. The courts having held that a common informer

could not sue Mr. Bradlaugh for sitting and voting without taking the oath, also gave him damages in an action against Mr. Newdigate, M.P., for "maintaining" the informer in his suit. An Affirmation Bill, brought in by the Government, was defeated on May 3rd, and he was again repulsed by the House. Bills were brought in on May 10th, giving tenants in England and Scotland compensation for improvements on the termination of their tenancy, were sent up to the Lords on August 1st, and, though at first rejected, finally passed. A bill for the suppression of corrupt practices at elections, containing provisions of an extremely stringent nature, and a bill for the improvement of the condition of agricultural labourers in Ireland, were also passed into law. Owing to complaints by British shipowners of delays, overcharges, and mismanagement by the administration of the Suez Canal, the Chancellor of the Exchequer entered into a provisional agreement with M. de Lesseps for the construction of a second canal by the Company, the English Government advancing £8,000,000 as a loan. This agreement, not being approved by the House, was dropped. Competing schemes—one for a canal from Alexandria to Suez, another from Acre by the valley of the Jordan to Akabah, and another promoted by M. de Lesseps himself—were brought forward, but finally dropped. A scheme for the construction of a submarine tunnel between Dover and Calais was brought before the House, and rejected upon the report of the military advisers of the Government.—On July 13th Tamatave, the principal seaport of Madagascar, was bombarded by the French fleet. Mr. Shaw, an English missionary, was imprisoned and ill-treated by the French, but, upon the representation of the British Government, set free with compensation.—In April a Queensland police magistrate took formal possession of New Guinea in the name of his colony; and united representations were made by the colonies, urging on the Imperial Government the importance of annexing, or proclaiming a protectorate over, not merely New Guinea, but also the New Hebrides and other groups in the Pacific not under the dominion of any power. Great disappointment was caused by the home government declining to endorse the action of Queensland, or to recognise the danger to the colonies should the authorities of the French penal settlements maintain their policy of refusing to receive back convicts who had escaped to the mainland or adjacent islands.—Public tranquillity continued to be maintained in Ireland. A pecuniary testimonial to Mr. Parnell was strongly advocated by Archbishop Croke, who was severely censured by a papal rescript for his action. The people, however, declined to take notice of the papal censure; and the testimonial, originally limited to £14,000, was spontaneously increased to £38,000, and presented to Mr. Parnell on December 11th, at Dublin.—Basutoland, in South Africa, taken under imperial protection.—The Court of Queen's Bench, on February 9th, 1884, decided, in case of Bradlaugh v. Gosset, that the House had absolute jurisdiction in matters relating to its own discipline, and over all proceedings occurring within its precincts. Mr. Bradlaugh, on the 11th inst., took a self-administered oath, and was again excluded. The Speaker, Sir Henry Brand, retired on February 25th, and was succeeded by Mr. Arthur

Peel.—On February 28th was brought in a bill extending household suffrage to counties, the £10 occupation franchise to lands without buildings, and introducing service franchise; the Government proposing to deal first with the Franchise Bill, and, when passed, to proceed with redistribution and registration, and then dissolve. After long discussion, in the course of which an amendment to extend the franchise to women was rejected, the Bill was sent up to the Lords on June 26th. On July 7th they agreed to accept the principle of the Bill, but declined to pass it until a measure of redistribution was before them; and, after some negotiation, the Bill was finally rejected on July 17th. On April 8th a bill for extending the jurisdiction of the Corporation of London to the Metropolis had to be abandoned, with many other bills, at the sudden close of the session on the rejection of the Franchise Bill. On April 24th the budget was introduced, showing—receipts, £85,555,000; expenditure, £85,292,000; surplus, £263,000, after paying out of revenue both the balance of the war deficit left by the previous Government and the share paid by the home government to India on account of the Afghan war. The national debt, which in March 1883 amounted to £712,699,000, had been reduced, at the end of March 1884, to £640,631,000,—a reduction of more than £72,000,000. A scheme for conversion of £612,000,000 of 3 per cent. stock into 2½ and 2 per cent. stock was also approved.—On February 26th an explosion of dynamite concealed in the cloak-room of Victoria station, London, occurred; simultaneous attempts to blow up railway stations at Ludgate Hill, Charing Cross, and Paddington, failed only through defect in machinery. On March 30th two took place in St. James's Square and one at Scotland Yard; and on December 13th another unsuccessful effort was made to destroy London Bridge.—A modification of the Transvaal Convention, abolishing the royal suzerainty, but maintaining right of veto on treaties with foreign powers, was signed on February 22nd, and an improved system of frontier policy and a permanent native department was established in South Africa early in March. On March 28th the death of the Duke of Albany took place. Early in the autumn Sir C. Warren was sent out to Bechuanaland; he organised a force of about 6,500 men, expelled the Dutch freebooters, who had established the *soi-disant* republics of Stellaland and Goshen, in the territory of the native chief Montsioa, and brought to justice the murderers of Mr. Bethell. On November 6th Professor Fawcett, the Postmaster-General, died, deservedly regretted for his talents and integrity.—A winter session commenced on October 23rd: the Franchise Bill was introduced the next day, and sent up to the Lords on November 13th; on the 18th it was read a second time. On the 25th Mr. Gladstone brought forward a Redistribution Bill (drawn up in concert with Lord Salisbury), which disfranchised all boroughs under 15,000 population, took one member from all boroughs under 50,000, and increased the number of members from 658 to 670—12 additional members being given to Scotland, and the representation of the Metropolis, the large towns, and the manufacturing districts being largely increased. On December 4th, previous to

the second reading, Mr. Courtney, the financial secretary to the Treasury, took exception to the provision for one-member constituencies, and to the omission of proportional representation from the Bill, and announced his resignation. After being read a second time, the House adjourned for the Christmas holidays. The Franchise Bill passed the Lords on the 5th, and became law next day.—In November and December disturbances took place in Skye and Lewis, among the crofters (*q.v.*), in resistance to eviction by landlord; and marines were landed in support of the civil authorities.—On January 3rd 1885, another dynamite explosion occurred on the Metropolitan Railway, between Gower Street and King's Cross, by which several people were injured; and on the 24th a parcel of dynamite, with a burning fuse attached, was discovered in Westminster Hall: it exploded, and severely injured two policemen, who were in the act of removing it; almost simultaneously another explosion took place in the House of Commons, inflicting very great damage on the building. On the same day another explosion took place in the armoury of the Tower of London, and two persons were injured. The gates being promptly closed, and all visitors examined, a person named Cunningham was arrested on suspicion. Shortly afterwards an accomplice named Burton was arrested, and evidence was obtained to connect the prisoners with all the explosions that had taken place within the metropolis. The two prisoners were convicted in May, and sentenced to penal servitude for life. Since their conviction no other outrage of a like nature has taken place.—On the meeting of parliament, Mr. Bradlaugh made another unsuccessful appeal (on January 28th, 1885). On February 20th, the day after the reassembling of parliament, the Redistribution Bill went into committee. On March 3rd a motion in favour of a single transferable vote was lost; on the 10th the House refused to disfranchise the universities; on May 11th the Bill passed the Commons, and on the 18th the Lords, subject to amendments in detail; and on June 25th it received the royal assent.—After the occupation of Merv, Turkestan, by Russia, a joint commission being appointed by the two countries to fix the northern frontier of Afghanistan, the British commissioner arrived at Penjdeh, on the frontier, in September 1884; the Russian commissioner had not arrived. On February 7th, 1885, the Russian troops advanced within the Afghan frontier, and on March 30th they, unjustifiably, drove the Afghans out of Penjdeh with great loss.—On April 21st the Premier requested a vote of credit of £11,000,000, partly on account of the Soudan war, and partly for military and naval expenses rendered necessary by the strained relations with Russia.—On the 30th the budget was brought in: the estimates for 1885-86 showed an income of £85,180,000, and an expenditure of £88,672,000, leaving a deficit of £3,732,000; this, with the vote of credit and some supplementary estimates, made the total deficit up to £14,922,000, the largest since the Crimean war. It was proposed to raise the income tax to 8d., to increase the duty on spirits 2s. the gallon, and that on beer by 1s., to equalise the probate duties, and tax foreign securities, carrying over the balance of the deficit, £7,432,000, to the next year. On June 5th it was stated

that only about £9,000,000 of the vote of credit would be spent; it was therefore proposed to reduce the spirit duties by 1s. per gallon, and make the increase in the beer duty to last only to May 1886. On June 8th a motion declaring the increase of the beer and spirit duties to be inequitable was passed by a majority of 12. The Government thereupon resigned, and on June 23rd a Conservative Government under Lord Salisbury was installed.—In the mean time the Ameer of Afghanistan visited Lord Dufferin, the Viceroy of India, at his Durbar at Rawul Pindi. The difference with Russia evoked the most gratifying offers of support from the native princes and subjects in India, much of this loyalty being due to the liberal policy of the present and the late Viceroy (the Marquis of Ripon). On May 4th Mr. Gladstone stated that he had reason to believe that the differences with Russia would be settled. On May 14th a grant of £6,000 per annum was made to Princess Beatrice, on her proposed marriage; and it was proposed in the next session to appoint a committee to consider the question of similar grants to the royal family. On July 6th Mr. Bradlaugh was again expelled by the House. On July 9th the new Chancellor of the Exchequer stated that he proposed to raise the income tax to 8d., and to meet the balance of the deficit by the issue of exchequer bills, and by intercepting the sinking fund. An Act for forming the Australian Colonies into a federation, and another for reducing the charge on inland telegrams, were the only other bills of importance. On August 14th parliament was prorogued.—On September 30th a protectorate was proclaimed over Bechuana-land. An insurrection headed by Riel, the leader of a former rising in Manitoba, and supported by the half-breeds, took place on the Saskatchewan river, in British North America. The half-breeds, on the dissolution of the Hudson's Bay Company Government, had received grants of land, and then exchanged them for other land farther west; unable to obtain redress for grievances, true or false, arising out of the exchange, they revolted, but after some fighting at Battleford, etc., Riel submitted in May, was tried and executed at Montreal in November. On November 5th, the Canadian Pacific railway, uniting the St. Lawrence with British Columbia, was opened.—A war with Burmah broke out in November. An English company had leased certain forests from the king, and had in addition made loans to him. On further advances being refused, the King caused a collusive action in his own court to be brought against the company, and inflicted a fine of £250,000, and ordered their property to be seized. Redress being refused, a force under General Prendergast was sent against him, his capital was occupied almost without resistance, his person secured and sent to Madras, and the country temporarily administered until the future government was determined on.—The Viceroy of India, Lord Dufferin, in the same month made a progress through Rajputana and western India, and was everywhere received with enthusiasm by the native population. On December 2nd he visited the Maharajah of Scindiah, and held a Durbar, at which he restored the fortress of Gwalior, which had hitherto been occupied by a European garrison, to Scindiah, and also permitted him to increase his army. The delimitation of the

Afghan frontier proceeded satisfactorily. In the same month also we had to deplore the death, at the age of seventy-two, of Dr. W. B. Carpenter (*q.v.*), the distinguished biologist and physiologist.—On the 18th parliament was dissolved. The result of the general elections has been slightly to diminish the numbers of the Conservatives and Liberals, and greatly to increase the Home Rule party; the Liberals elected amounting to 333, the Conservatives to 249, the Home Rulers to 86, the Independents 2. It is therefore probable from the state of parties that large concessions will be made to Ireland in regard to local government.—An Indian National Congress met, December 27th, at Bombay, when resolutions were passed advocating the direct representation of the people upon the Supreme and local Legislative Councils, the reduction of the army, and other financial and administrative reforms. The troops in Burmah pushed on to Bhamo, being everywhere well received by the Burmese. (This country has, by proclamation of January 1st, 1886, been annexed to Her Majesty's dominions.) The House of Commons met, and re-elected Mr. Peel as their Speaker, January 12th, 1886.—The Queen formally opened the eleventh Parliament on the 19th. Mr. Bradlaugh was allowed to take the oath without question. The Queen's Speech (*q.v.*) was noticeable chiefly for an allusion to the possible necessity of coercion in Ireland; and on January 25th notice was given of a bill for the suppression of the Land League and other dangerous societies. On the same evening an amendment to the address regretting that the Speech announced no measure facilitating the acquisition of allotments by agricultural labourers was moved by Mr. Collings and supported by Mr. Joseph Arch, in his maiden speech, and carried against the Government by 329 to 250, the Parnellites voting with the Liberals. The Government, treating the vote as one of want of confidence, at once resigned, and a ministry was formed by Mr. Gladstone, including the leading members of the Liberal party, with the exception of Lord Derby, Lord Hartington, and Mr. Goschen. After the close of meetings held by the Social Democratic Federation and the United Workmen's Committee, in Trafalgar Square, on February 8th, a large mob, chiefly composed of the dangerous classes, broke the windows of clubs and pillaged many shops in the West End, considerable damage being done before the police were able to disperse the rioters. For the following two days a panic prevailed, and shops were closed generally throughout the Metropolis, but on the 11th confidence seemed to be restored. A committee was appointed, under the presidency of the Right Hon. J. Childers, to investigate the action of the police. Some of the instigators of the riots have been prosecuted. Riots arising out of trade disputes also occurred at Leicester on the 10th and 12th. The death of Lord Cardwell (*q.v.*) took place on February 15th. He was chiefly remarkable for the part he took in the abolition of purchase, and the introduction of short service in the army. On February 18th Parliament resumed its sitting, and the annexation of Burmah was confirmed on the 22nd. The committee of investigation into the cause of the West End riots presented its report to the House of Commons the same day. Colonel Henderson resigned his office as Chief Com-

missioner of Police at the same time. The Crofters' Bill was introduced in the House of Commons by Mr. Trevelyan, and read the first time.—Mr. Gladstone having promised to bring in a bill early in April to deal with the Irish question, on going into committee of supply an amendment, declining to entertain Irish civil estimates until Irish policy of Government was before the House, was defeated. On March 8th the second reading of the Crofters' Bill was agreed to. 9th. A resolution declaring the Established Church in Wales to be an anomaly, was defeated by 241 to 229 votes. 10th. Mr. Richards' motion, to limit the power of the executive in declaring war without first obtaining the consent of Parliament, was negatived by 115 to 109 votes. In the Lords, Lord Thurlow's resolution for opening the British Museum and National Gallery on Sundays, was carried by 76 to 62 votes. 16th. A resolution to repeal the Contagious Diseases Acts (1866-9), was agreed to. The Parish Churches Bill, introduced in the Lords by the Bishop of Peterborough, was read the second time and referred to a select committee. 17th. A bill for removal of obstacles to the reunion of the Free Churches with the Established Church of Scotland was rejected by 202 to 177. Army estimates (see APPENDIX) for 1886-87 presented to parliament. 18th. Committee of Procedure of House of Commons held its first sitting and appointed Lord Hartington chairman. The Lunacy Act Amendment Bill read in the Lords and passed through committee. Navy estimates (see APPENDIX) introduced by Mr. Hibbert. 22nd. Debate on Mr. Howard Vincent's resolution to increase the Capitation Grant to Volunteers: rejected. In the Lords the Law of Evidence Amendment Bill passed through committee. 24th. The Tithe Rent-Charge Amendment Bill passed the second reading, and was referred to a select committee. Discussion in the Lords on the duties of soldiers during riots. The Queen laid the foundation stone of the new Medical Examination Hall to be erected on the Thames Embankment. 27th. Resignation of Rt. Hons. J. Chamberlain and G. O. Trevelyan announced, in consequence of divergence of views on Mr. Gladstone's Irish policy; they were succeeded in their respective offices by the Rt. Hon. J. Stansfeld and Lord Dalhousie. Mr. Thorold Rogers' resolution, involving large changes in the system of local taxation, passed by 216 to 176. In the Lords, the Union of Benefices Bill was rejected on the second reading. 28th. Dr. Trench, the late Archbishop of Dublin, died. 30th. Mr. Gladstone announced that on April 8th he would move for leave to bring in a bill "to amend the provisions for the future government of Ireland," and on the 15th for leave to bring in a bill "to make amended provision for the sale and purchase of land in Ireland." 31st. Dr. Cameron's resolution in favour of the disestablishment and disendowment of the Church of Scotland rejected by 237 to 135. Police Forces Enfranchisement Bill read a second time. Revenue returns for the financial year ending March 31st amounted to £89,581,301, being £1,208,699 less than the Budget estimate. The Railway and Canal Traffic Bill, introduced by Mr. Mundella in the early part of the month, is now exciting considerable agitation in railway circles.—April 1st. The result of the Ipswich election petition declared: Messrs. Jesse Collings and H. W. West unseated.

Greece. A kingdom under George I., of Glücksburg. By the constitution of 1864, legislative power is vested in a single chamber (Boule), elected by ballot and manhood suffrage for four years. Boule meets annually for not less than three nor more than six months' sitting; not valid unless at least half the members are present, and no law can pass without absolute majority of members. Executive vested in king and responsible ministers. Greek orthodox Church state religion, other sects tolerated, complete liberty of worship. Revenue (1885), £3,234,782; expenditure (1884), £3,179,627; debt, £28,000,000; army, 30,000; navy, 1 ironclad and 18 other vessels, and 48 torpedo steamers; area about 25,111 square miles; pop. 2,000,000.—1872. Laurium mines purchased by state. Payment being evaded, disputes with France and Italy arose, and ministerial changes ensued. The mines were eventually purchased by Greek capitalists in 1875. Greece was neutral in respect of rising in Bosnia. During the Serbian war British and Turkish governments remonstrated with Greece for her armaments. Insurrection in Thessaly, January 1878; 10,000 Greek troops enter. An armistice made, and the troops withdrawn. Insurrection concluded in February. A battle takes place at Macriniza; Mr. Ogle, newspaper correspondent, killed (March). British intervention in May. New frontiers recommended by Berlin treaty. Greece claims Crete and Thessaly (July). Law of universal military service passed (Nov.) In October 1880 king opened chamber with warlike speech. Tricoupis, the Premier, replaced by the more energetic Coumoundouros, and vigorous preparations made for war, with the avowed purpose of seizing Thessaly and Epirus. A compromise was proposed, and the matter referred to the arbitration of the six Great Powers. In April 1881 Thessaly and part of Epirus was assigned to Greece, and evacuated by Turks in July. In May 1882 a canal through Isthmus of Corinth commenced. In August some fighting took place between Greek and Turkish troops, as to possession of certain points on new frontier, the matter being ultimately settled by the frontier commissioners. The Tricoupis ministry displaced that of Coumoundouros. In March 1884 the Opposition in Chamber seceded in a body, on ground of wasteful and corrupt expenditure of ministry, who retained, however, sufficient supporters to enable them to carry on the business of the country. In autumn of 1885, upon the union of Eastern Roumelia with Bulgaria, the reserves were called out and a war loan contracted, and in reply to the remonstrances of the Powers, Greece pointed out that she had consented to receive less than her due under the Berlin Treaty, and that she claimed to receive an increase of territory if the balance of power in the Balkan peninsula were disturbed. On December 17th the Chamber unanimously voted a loan of £4,000,000 to be spent on the army and navy. Energetic preparations for war were made in view of the demand for rectification of frontiers. In his reply to the joint note of the Powers, the King having declined to disarm, was informed on January 23rd, 1886, that England would prevent any attack by Greece upon Turkey; and at the same time Mr. Gladstone, acting on the lines of the policy pursued by Lord Salisbury, addressed a letter to the people of Athens, earnestly recommending their countrymen to defer to the wishes of

Europe. On March 18th two more classes of reserves were called out, amounting to 100,000 men. The British fleet, in conjunction with the other Powers, is now (March 31st) at Suda Bay, Crete, under orders to prevent a collision between Greek and Turkish war-ships, and to enforce the decision of the Conference. The Chamber have been summoned to meet on April 2nd; and in the bellicose and excited state of public feeling it is difficult to predict what results may arise.

Greek Orthodox Church, or Orthodox Eastern Church. Name of that community of Christians who profess the same faith, partake of the same sacraments and sacrifice, and recognise as Head of their Church Jesus Christ, and are governed by patriarchs, synods, metropolitans, archbishops, and bishops. The first of the patriarchs—the Patriarch of Constantinople, who is also entitled œcumenical patriarch—has under his jurisdiction Herzegovina, Bosnia, Albania, Epiros, Macedonia, Thrace, Asia Minor, and the Greek islands under Turkey. Egypt is under the jurisdiction of the Pope and Patriarch of Alexandria, Syria under that of the Patriarch of Antiochia, and Palestine under that of the Patriarch of Jerusalem. Russia is governed by a Holy Synod, composed of bishops and priests, and residing in St. Petersburg. Greece is governed by a Synod composed of four bishops and the metropolitan of Athens as permanent president. Cyprus is governed by an archbishop and three metropolitans under him. The churches of Roumania and Servia are also independent churches, and are governed by metropolitans. The supreme authority in the Church are the Ecumenical Councils. The rule of faith is the whole Word of God, written and unwritten, and this as taught and explained by the Church. The centre of the worship is the mass, which is the mystical sacrifice of the body and blood of Christ, instituted by Himself at the Last Supper. Scripture and tradition are appealed to in support of this sacrament, as also of the sacraments of baptism, chrism (confirmation), matrimony, ordination, repentance, and the anointing of the sick. The mediation of the Virgin, of the angels and of the saints is invoked, but the worship of them is repudiated by the Church. There is a difference between doctrine and discipline—the former, belonging to the deposit of faith taught by Christ and the Apostles, and formulated by the Ecumenical Councils, is invariable; the latter, founded on the canons of the Ecumenical and Topical Councils, is the Church's external policy as to government, and may vary according to times and circumstances. The members of the Orthodox Greek Church amount to about 80,000,000.

Greek Version. See REVISED BIBLE, THE.

Green Books. See BLUE BOOKS.

Green, Sir Edward, Bart., M.P., was b. 1831. He is the head of the Phoenix Ironworks Company at Wakefield; J.P. for West Riding of Yorkshire and for Norfolk; Director of the Lancashire and Yorkshire Railway Co. Returned in the Conservative interest as member for Wakefield (1874), but unseated on petition; re-elected 1885. Made a baronet 1886.

Green, Mr. Henry, M.P., was b. 1838. Educated at Cheam School, Surrey, and Univ. of Bonn. Senior partner in the firm of Messrs. Richard and Henry Green, shipowners. Is a J.P. for Middlesex and a Director of the East and West India Dock Co. Returned in the

Liberal interest as member for Poplar Division, Tower Hamlets (1885).

Greenall, Sir Gilbert, of Walton Hall, Cheshire, was b. 1806. Is Deputy Lieutenant for Lancashire (High Sheriff 1873), and J.P. for Cheshire and Lancashire. Returned in the Conservative interest as member for Warrington (1885).

"Greenwood, Grace." See NOMS DE PLUME.

Gregory, Mr. George Burrow, M.P., M.A. (Cantab.), was b. 1873. Educated at Eton and Trin. Coll., Cambridge. Is partner in the firm of Messrs. Gregory, Rowcliffe, Rowcliffe, and Rawle, solicitors, Bedford Row. Treasurer of the London Foundling Hospital. Returned in the Conservative interest as member for East Sussex (1868-85; North Sussex (1885).

Grenfell, Mr. William Henry, M.P., was b. 1855. Educated at Harrow and Balliol Coll., Oxford. Returned in the Liberal interest as member for Salisbury (1880-82); re-elected 1885.

Greville, Algernon William Fulke Greville, 2nd Baron (creat. 1869); b. 1841; succeeded his father 1883. Was Groom-in-waiting to the Queen (1868-73), and a Lord of the Treasury (1873-74); M.P. for Westmeath (1865-74).

Grévy, Jules, President of the French Republic, b. 1807, at Mont-sous-Vaudrez, in the Department of the Jura. Educated at the college at Poligny, he studied law in Paris and began his career as an advocate. He gained distinction as counsel in his defence of the revolutionists of 1830. After the Revolution of 1848, he was Commissary of the Provisional Government in the Jura, and was returned by that department to the Constituent Assembly, in which he was a member of the Committee of Justice and a vice-president. During the Presidency of Louis Napoleon, M. Grévy opposed the policy of the future Emperor. After the Franco-German war, M. Grévy came again to the front, and from 1871 to 1873 was President of the National Assembly, to which in 1876 he was again returned, and elected President of the Chamber of Deputies. This office he held till 1879, having been re-elected twice. On the retirement of Marshal MacMahon from the Septennial Presidency of the Republic, M. Grévy was elected his successor, Jan. 20th, 1879. Re-elected December 28th, 1885. M. Grévy's presidency has been characterised by great moderation and tact.

Grey, Mr. Albert Henry George, M.P., of Howick, Northumberland, was b. in St. James's Palace 1851. Educated at Harrow and Trin. Coll., Cambridge. Senior in the Law and History Tripos (1874). Returned in the Liberal interest as member for Tyneside Div. (1885).

Grey, Sir Edward, M.P., of Falloden, was b. 1862. He is the son of Lieut.-Colonel George Henry Grey, Esquerry to H.R.H. the Prince of Wales. Educated at Winchester and Balliol Coll., Oxford. For some time private secretary to Sir Evelyn Baring. Returned in the Liberal interest as member for Berwick-on-Tweed Div. (1885).

Grey, Henry Grey, 3rd Earl (creat. 1806), K.G., P.C., G.C.M.G.; b. 1802, succeeded his father 1845. Was Under-Secretary of State for the Colonies (1830-33); Under-Secretary for the Home Department (Jan. till July 1834); Secretary-at-War (April 1835 to Sept. 1839); Secretary of State for the Colonies (July 1846 to Feb. 1852); was M.P. for Winchelsea (1826-30), for Higham Ferrars (1831), for North Northumberland (1831-41), and for Sunderland (Sept.

1841 till July 1845). The 2nd Earl was Prime Minister (1830-34).

Greytown. See **ENGINEERING (NICARAGUA SHIP CANAL).**

Griffiths' Valuation. Sir Richard Griffiths, a Welshman, who was especially celebrated for his knowledge of fiscal questions and matters affecting landed property, was appointed under a special Act of Parliament to value the land of Ireland for the purposes of taxation. He commenced this important task about the year 1830, and spent the greater part of the ten years following in making a most elaborate and minute survey. A good deal of the work was necessarily performed by deputy; but Sir Richard superintended, and it is generally admitted that his valuations were equitable, besides being arrived at with exceptional skill, and on the strength of marvellously complete information. They do not apply to urban property. The valuation was about 30 per cent. below the average of rents in Ireland prior to the Act of 1881; and since that year the judicial rents fixed by the Land Courts have approached a mean between the average of landlords' valuation and Griffiths' valuation.

"Grimbosh, H." See **NOMS DE PLUME.**

Grimsthorpe, Edmund, 1st Baron (creat. 1886), the title by which Sir Edmund Beckett has been recently raised to the peerage.

Grimston, Hon. James Walter, Viscount, M.P., the eldest son of the Rt. Hon. the Earl of Verulam, was b. 1852. Educated at Harrow, and served in the 1st Life Guards. Returned in the Conservative interest as member for Mid Hertfordshire (1885).

Grimston Patent Lamp. See **ILLUMINANTS.**

Grinstead, Baron. See **ENNISKILLEN.**

Griqualand East. See **KAFFRARIA.**

Griqualand West. A province or district of Cape Colony; area 16,000 sq. miles; capital Kimberley. It has Bechuanaland on the N., Orange Free State on the E., and the Orange river divides it from the rest of Cape Colony on the S. It was settled after 1836 by the Griquas or "Baastards," a tribe of Dutch-Hottentot half-breeds. A party under the chief, Adam Kok, migrated from it to Noman's Land, since called Griqualand East, one of the Transkeian territories, in 1852. In 1867 diamonds were discovered in Griqualand West, and a rush from all sides into it ensued. In 1871 the Griqua chief, Waterboer, was induced to cede his authority, and the province was annexed to Cape Colony, but with independent jurisdiction. In 1881 it became an integral part of Cape Colony. It is the chief seat of the diamond diggings. See **CAPE COLONY.**

Grocers, The Worshipful Company of. See **CITY GUILDS, THE.**

Grosvenor, Rt. Hon. Lord Richard De Aquila. See **STALBRIDGE, BARON.**

Ground Game Act, 1880. See **GAME LAWS.**

Grove, Sir Thomas Fraser, M.P., late of the 6th Inniskilling Dragoons. Deputy Lieutenant and J.P. for Wilts. He is also J.P. for Dorset. Formerly High Sheriff for Wilts. Colonel of the Wilts Yeomanry. Returned in the Liberal interest as member for South Wiltshire (1865-74); re-elected 1885.

Guano. See **MANURES.**

Guardianship of Infants Bill, 1885. This Bill, as amended by a Select Committee of the House of Lords, provides that on the death of the father of an infant, the mother, if surviving, shall be its guardian, either alone

or jointly with any guardian appointed by the father. Where there is no such guardian, or he dies or declines to act, the court may appoint a guardian to act jointly with the mother. The mother of an infant may, by deed or will, appoint any person to be guardian after the father's death, or guardian jointly with the father after her death; but the latter appointment must have the confirmation of the court. Where guardians are appointed by both parents, they are to act jointly. In the event of disagreement between the guardians, any of them may apply to the court, and it may make such order as it shall think proper. The court is to have power to make an order for the custody of an infant upon the application of the mother, and with regard to the conduct and wishes of both parties. The court referred to is, in England and Ireland, the High Court or the county court (with powers of removal and appeal to the High Court); and in Scotland, the Court of Session and the sheriff's court. Applications to the High Court are to be made to the Chancery Division by petition or summons at chambers.

Guion, Stephen Barker, d. December 19th, 1885. He originated the "Guion Line" of Atlantic steamers. From 1869 until last November he represented Exchange Ward in the Liverpool City Council. He was by birth an American; but about thirty-four years ago was naturalised as a British subject.

Gum Kofi. See **TOGO-LAND.**

Gunmakers, The Worshipful Company of.

Gunter, Mr. R., M.P., was b. 1831. Educated at Rugby. Late of the 4th Dragoon Guards. He is a J.P. Returned in the Conservative interest as member for Knaresborough during part of the last session. Returned for Barkston Ash Division, West Riding (1885).

Gurdon, Mr. Robert Thornhagh, M.P., of Letton Hall, Norfolk, was b. 1829. Educated at Eton and Trin. Coll., Cambridge. Called to the bar at Lincoln's Inn (1856). Chairman of Norfolk Quarter Sessions, J.P. and Deputy Lieutenant for the county. Returned in the Liberal interest for Mid Norfolk (1885).

Gurney, Mr. Russell. See **WOMEN'S RIGHTS.**

"Gushington, Angelina." See **NOMS DE PLUME.**

Guy, W. A., M.B., F.R.S., F.R.C.P., d. Sept. 10th, 1885, in the 76th year of his age. He was b. at Chichester, and educated at Christ's Hospital, Guy's Hospital, and Pembroke Coll., Cambridge. In 1831 he obtained the Fothergillian prize medal for an essay on asthma, and in 1837 graduated M.B. In 1838 he was appointed to the chair of forensic medicine in King's Coll., and in 1842 physician to King's Coll. Hospital. He was admitted a Fellow of the Royal College of Physicians in 1844, held office as Censor in 1855, 1856, and 1866, as Examiner in 1861-3, and in 1861, 1868, and 1875 was appointed Croonian, Lumleian, and Harveian Lecturer.

Gwydyr, Peter Robert Burrell, 4th Baron (creat. 1796); b. 1810; succeeded on the death of his kinsman the last Baron Willoughby de Eresby (1870) to the title of Gwydyr, which passed to him through his grandfather the 1st Lord Gwydyr, whilst the barony of Willoughby de Eresby fell into abeyance between the two sisters of the last holder of that title.

H

H. See MINERALOGY.

Habeas Corpus, Writ of. A writ directed to a person who has another person in custody requiring him to produce his prisoner in court upon a day specified therein. From the time of Magna Charta imprisonment at the discretion of any person, even the sovereign, has been unlawful in England. But down to the seventeenth century the royal prerogative was so indefinite, and the royal power so great, that persons were frequently detained in custody at the discretion of the Crown. In order to make the writ effectual it was provided by an Act of the 31st year of Charles II. (1679), that upon service thereof the person having custody of the prisoner should (unless the commitment were for treason or felony plainly expressed in the warrant) produce him before the Lord Chancellor or Lord Keeper, or any one of the judges of the court whence the writ issued, and should certify the cause of his imprisonment. Disobedience to the writ subjected the offender for a first offence to a penalty of £100, and for a second offence to a penalty of £200 and incapacity to execute his office. When the prisoner has been produced the court may discharge him, either absolutely or upon his recognisances. Once set free, he cannot be recommitted on the same charge otherwise than by legal process issuing out of the court in which he has been bound by recognisances. Any one recommitting him otherwise incurs a penalty of £500. If any person committed upon a charge of treason or felony plainly expressed in the warrant prefer a petition in the first week of term or on the first day of the assizes to be put on his trial, and if he is not indicted the next term after his commitment, the judges may, and upon motion made the last day of term or of the assizes must, set him at liberty on bail, unless it is proved to them that the witnesses for the Crown could not be produced the same term or the same assizes. If upon such petition as above mentioned he is not indicted, the second term after his commitment he must in any case be discharged from his imprisonment. A person committed cannot be removed from prison to prison otherwise than on certain specified grounds, nor can he be sent to a prison out of the kingdom. Any person so sent has an action for false imprisonment against those who sent him, in which he is to recover treble costs and at least £500 damages. The culprits further incur perpetual incapacity for office, and other penalties. By an Act of the 56th year of George III. (1816), the judges are required to issue the writ of habeas corpus in vacation time upon probable ground for complaint shown, and such writ is to be returnable immediately. Upon the return of the writ the judge may inquire into the facts contained in the return, and if they appear doubtful to him he may enlarge upon bail the person committed. Disobedience to the writ constitutes a contempt of court. But the provisions of the last-named Act do not apply to a person committed for a criminal or supposed criminal matter. The general effect of the above Acts is to reduce within the strictest limits all imprisonment of persons not convicted of any criminal offence.

In troubled times, however, they have occasionally been suspended for short periods.

Haberdashers, The Worshipful Company of. See CITY GUILDS.

Habitual Criminals Act Amendment Bill, 1884. A bill presented by the Earl of Milltown, purporting to amend the Habitual Criminals Act of 1869 (which had been totally repealed in 1871) by extending to all cases of resisting or wilfully obstructing a police constable in the execution of his duty, or his assistants, the maximum penalty of £20 fine or six months' imprisonment with hard labour, provided by the repealed Act for persons convicted of assault and battery upon police constables engaged as aforesaid.

Haddington, George Arden Bailie-Hamilton, 11th Earl of (creat. 1619); b. 1827; succeeded his father 1870. Elected a representative peer for Scotland (Jan. 1874).

Haeckel, Ernst. The best known of the popularisers of Darwin in Germany: he is both brilliant and accurate. Was b. Feb. 16th, 1834, at Potsdam. Pupil of Johannes Müller and Virchow, at Berlin and Würzburg. Afterwards worked at Vienna. Went on a zoologist's excursion to Heligoland and Nice. Took his Doctor's degree (1857). Practised medicine at Berlin less than two years. Visited Naples and Messina (1859); returned to Germany (1861). Private teacher of Zoology at Jena (1862); made Extraordinary Professor of Comparative Anatomy at Jena University, then Ordinary Professor (1865)—a position he still holds. Visited England (1866), where he met Darwin; Madeira, Tenerife, the Canaries, Spain; in 1869, 1873 (Red Sea), 1875, 1882 (Ceylon).—Works: "On certain Tissues of the common Crayfish"; Latin treatise on taking his degree; "Die Radiolarien" (the Radiolaria)—a monograph on an order of Rhizopoda; "Beiträge zur Naturgeschichte der Hydromedusæ" (Contributions to the Natural History of the Hydromedusæ); "Generelle Morphologie der Organismen" (based on Darwin's views); "Gesammelte populäre Vorträge" (translated by Aveling as "The Pedigree of Man"); monograph of the Siphonophora (a class of Hydrozoa); "Biological Studies"; monograph on Calcareous Sponges (containing a premature hypothesis as to the evolution of these organisms); "Anthropogenie" (history of man's development); "Arabische Korallen"; "Protistenreich" (account of Protista, or first living beings, neither distinctively animals nor plants); "Free Science and Free Teaching" (answer to Virchow's attack on Evolution); "Natürliche Schöpfungsgeschichte" (translated as the "Natural History of Creation"); "Travels in Ceylon" (translated); pamphlet on "Aurelia aurita" a Medusa; monograph of Medusæ, and on Radiolaria collected in the voyage of the *Challenger* (both in progress).

Hamatite. See MINING.

Hagada. See TALMUD.

Haghe, Louis, President of the Royal Institute of Painters in Water Colours, d. March 9th, 1885. He was b. at Tournay, in Belgium, 1806. He came to England to practise his art, and his pictures were regularly to be seen at

the annual exhibitions of the Institute. In 1847 he was elected a member of the Belgian Academy and of the Academy of Antwerp, and made a Knight of the Order of Leopold I. His lithographic works gained him the gold medal at Paris (1834), and he was awarded a second-class medal for water-colour painting at the Paris Exhibition (1855). The Manchester Academy also awarded him the Heywood gold medal.

Halacha. See TALMUD.

Haldane, Mr. Robert B., M.P., was b. 1856. Educated at Edinburgh Univ., where he graduated M.A. Member of the English bar. Returned in the Liberal interest as member for Haddingtonshire (1885).

Haldon, Lawrence Hesketh Palk, 2nd Baron (creat. 1880); b. 1846; succeeded his father 1883.

Halifax, Chas. Lindley Wood, 2nd Visct. (creat. 1866); was b. 1839, and succeeded his father 1885; is President of the English Church Union. The 1st Visct. was successively Chancellor of the Exchequer, First Lord of the Admiralty, Secretary for India, and Lord Privy Seal.

Halifax, Charles Wood, 1st Viscount, d. Aug. 9th, 1885. He was b. Dec. 20th, 1800. He was educated at Eton and Oriel Coll., Oxford, where he graduated double first (1821). In 1826 he was returned to Parliament for Grimsby, in the Liberal interest, and in 1831 for Wareham. In the following year he was returned for Halifax at the general election which took place after the passing of the Reform Bill. He continued to represent Halifax for thirty-two years. After filling the offices of Secretary to the Treasury and Secretary to the Admiralty, he was appointed Chancellor of the Exchequer. The same year he succeeded to the baronetcy on the death of his father. In February 1866 he resigned the office of Secretary of State for India, and was raised to the peerage.

Hall, Mr. Alexander William, M.P., was b. 1838. Educated at Eton and Exeter Coll., Oxford. Deputy Lieutenant and J.P. for Oxfordshire; High Sheriff (1867). Returned in the Conservative interest as member for City of Oxford (1874-80); re-elected 1880, but unseated on petition; re-elected 1885.

Hall, Mr. Charles, Q.C., M.P., second son of the late Vice-Chancellor Sir Charles Hall, was educated at Harrow and Trinity College, Cambridge. He was called to the bar at the Middle Temple (1866), created Q.C. (1881), Bencher of his Inn (1884). Attorney-General to H.R.H. the Prince of Wales in the Duchy of Cornwall (1877). Elected as Conservative member for West Cambridgeshire (1885).

Hallé, Charles, esteemed pianist, editor, and conductor of the day, b. 1819, the son of a local bandmaster near Elberfeld. He studied chiefly at Paris, and in 1846 gave concerts there. Driven to England in 1848 by the Revolution, he took up his residence here. For many years he has been at the head of classical pianists; and since about 1857 has gained fame as conductor of an orchestra at Manchester, and has become recognised, since Costa's death, as one of the best orchestral conductors. In addition, Hallé has edited large numbers of the finest classical authors, and has done much for the culture of the highest class of music.

Hallett, Col. H., M.P. See HUGHES-HALLETT.

Halsbury, Hardinge Stanley Gifford, P.C., 1st Baron (creat. 1885); b. 1825: late Lord Chancellor and President of the Supreme Court of Judicature. He attained to his late high position by his personal acquirements and talents. He belongs to an old family, the Giffords of Devon. Mr. Gifford, after graduating at Oxford, was called to the bar at Lincoln's Inn (June 1850), becoming Q.C. (1865). Under the administration of Lord Beaconsfield he was appointed Solicitor-General (1875-80), and knighted (1880). On the accession to office of the Salisbury government (1885) he was made Lord Chancellor. His attainment to high judicial office is a remarkable exception to the general axiom of the English bar, that no criminal practitioner ever reaches the woolsack. He sat in parliament for Launceston (1877-85).

Halsey, Mr. Thomas Frederick, M.P. only son of the late Mr. T. Plumer Halsey, M.P. for Hertfordshire for some years, was b. 1839. Educated at Eton, and graduated M.A. at Christ Church, Oxford. Mr. Halsey is J.P. for Herts, and major in the Herts Yeomanry Cavalry. Returned in the Conservative interest as member for Hertfordshire (1874-85); West Hertfordshire (1885).

Hamilton, Colonel Charles Edward, M.P., was b. 1845. Educated on the Continent. Has been connected with the Panama Railway as English Agent. Elected to the Liverpool City Council three times. He is J.P. for Lancashire. Appointed colonel of the Lancashire Rifle Volunteers (1868). Returned in the Conservative interest as member for Rotherhithe (1885).

Hamilton, Lord Gland John, M.P., second son of the Duke of Abercorn, K.G., was b. 1843. Educated at Harrow. Late captain Grenadier Guards; Lieut.-Colonel 5th Battn. Royal Inniskilling Fusiliers; A.D.C. to Lord-Lieutenant of Ireland (1866-8). Has held the following official appointments: Junior Lord of the Treasury (1868); attached to Duke of Abercorn's special mission to the King of Italy (1878). Married (1878) Carolina, daughter of the late Mr. Edward Sacheverel Chandos-Pole. Returned in the Conservative interest as member for Londonderry (1865-68), Lynn Regis (1869-80), Liverpool (1880-5); re-elected (1885).

Hamilton, Lord Ernest William, M.P., was b. 1858. Youngest son of the late Duke of Abercorn. Educated at Harrow and the Royal Military Coll., Sandhurst. He was for a time an officer in the 11th Hussars. Returned in the Conservative interest as member for North Tyrone (1885).

Hamilton, Lord Frederick Spencer, M.P., fifth son of the late Duke of Abercorn, was b. 1856. Educated at Harrow. Experienced diplomat and extensive traveller. Returned in the Conservative interest as member for South-West Manchester (1885).

Hamilton, The Rt. Hon. Lord George Francis, P.C., M.P., third son of the late Duke of Abercorn, was b. 1845. Married Lady Maud Caroline, youngest daughter of the third Earl of Harewood (1871). Entered the Rifle Brigade (1866); was ensign and lieutenant Coldstream Guards (1868). Has held the following official appointments: Under-Secretary of State for India (1874-78), Vice-President of the Council and fourth Charity Commissioner (1878-80), and First Lord of the Admiralty (1885). Returned in the Conservative interest as member for

Middlesex (1868-85); re-elected, Ealing Div., 1885.

Hamilton, Mr. John Glencairn Carter, M.P., was b. 1829. Educated at Eton. Deputy Lieutenant and J.P. for Lanarkshire. Capt. late 2nd Life Guards; colonel Queen's Own Glasgow Yeomanry Cavalry. Returned in the Liberal interest as member for Falkirk Burghs (1857-59); South Lanarkshire (1868-74, 1880-85); re-elected 1885.

Hamilton, William Alexander Louis Stephen Douglas-Hamilton, K.T., 12th Duke of creat. 1643; Duke of Brandon and Baron Dutton (1711), by which last two titles he holds his seat in the House of Lords; was b. 1845, and succeeded his father 1863. 1st Premier Peer of the land; confirmed in the French dukedom of Chatelherault by decree (Aug. 1864). The 2nd Earl of Arran of this line was chosen Regent of Scotland (1542), and was the next year declared heir pres. to the Crown; he was created Duke of Chatelherault by Henry II. of France, a dignity which he subsequently surrendered to the French monarch. The 1st Duke was beheaded, having been taken at the battle of Preston, fighting under Charles I.; the 2nd Duke was slain at the battle of Worcester in the service of Charles II.

Hamilton, Sir William Rowan. See QUATERNIONS.

"Hamlet." See IRVING, HENRY, and BARRETT, WILSON.

Hamley, Lieut.-Gen. Sir Edward B., R.A., K.C.B., K.C.M.G., M.P., the fourth son of the late Admiral Sir William Hamley, was b. 1824. Educated at the Royal Military Academy, Woolwich. Entered the army (1843). He served in the Crimean war, took part in the battles of the Alma, Balaklava, and Inkerman. Gen. Hamley has held the offices of Professor of Military History at the Staff College, Sandhurst, member of the Council of Military Education, Commandant of the Staff College, Sandhurst, H.M.'s Chief Commissioner for the delimitation of Bulgaria, of the Turco-Russian frontier, supervisor of the evacuation of the territories ceded by Turkey to Greece, and commander of the second division of the expeditionary force in Egypt. He has also written several works on military subjects. Gen. Hamley was returned at the recent election (1885) for Birkenhead in the Conservative interest.

"Hammer." See TATTERSALL'S.

"Hammering." See STOCK EXCHANGE TERMS.

Hammond, Edmund Hammond, P.C., 1st Baron (creat. 1874), was b. 1802; Under-Secretary of State for Foreign Affairs; formerly Fellow of Univ. Coll., Oxford; appointed clerk in the Privy Council Office (Oct. 1823); a clerk in the Foreign Office (April 1824); Under-Secretary of State for Foreign Affairs (April 1854), resigned Oct. 1873.

Hampden, Henry Bouverie William Brand, P.C., 1st Visct. (creat. 1884), was b. 1814. Sometime private secretary to Sir Geo. Grey, a Lord of the Treasury (1855-58); Keeper of Privy Seal to H.R.H. the Prince of Wales (1858); and Parliamentary Secretary to Treasury (1859-66); was M.P. for Lewes (1852-68); and for Cambridge-shire (1868-84, when he was raised to the peerage); Speaker of the House of Commons (1872-84).

Hampton, John Slaney Pakington, 2nd Baron (creat. 1874), was b. 1826; succeeded his

father 1880. The 1st Baron was successively Secretary for Colonies, First Lord of Admiralty, and Secretary for War.

Hamington, Major-General. See FIRE AND LIFE INSURANCE.

Hanbury, Mr. Robert William, M.P., of Ilam Hall, Doveclade, Staffordshire, was b. 1845. Educated at Rugby and at Corpus Christi Coll., Oxford. Hon. Col. Preston Artillery Volunteers; Deputy Lieutenant and J.P. of Staffordshire. Returned in the Conservative interest as member for Preston (1885).

Handel, George Frederick, was b. at Halle u. Saale in 1685, and died in London in 1759. He came to London in 1712: when the Elector of Hanover became King of England as George I., Handel, who was in his service, settled in England. Of his chief works, the "Messiah" was written in 1741, and "Israel in Egypt" in 1738. Before beginning his grand English oratorios (the first, "Esther," was written in 1720) Handel was only known as an "Italian" opera composer (he wrote thirty-nine Italian operas), and was commonly called "Signor Handel." In all he composed nineteen oratorios.

Hand Grenade. See FIRE EXTINCTION.

Hänel, Dr. See GERMAN POLITICAL PARTIES.

Hankey, Mr. Frederick Alers, M.P., of Silverlands, Chertsey, was b. 1833. Educated at Harrow and Oriel Coll., Oxford. Chairman of the Consolidated Bank. Returned in the Conservative interest as member for North-West Surrey (1885).

Hannington, Rev. James, D.D., was a son of Mr. Samuel Hannington, of Brighton, and of Hurstpierpoint, Sussex. Educated at St. Mary Hall, Oxford, where he took his B.A. degree (1873), and M.A. (1875), in which year he became curate of St. George's, Hurstpierpoint, and remained there until 1882. Ordained deacon by the Bishop of Exeter in 1874, and priest in 1876 by the Bishop of Chichester. He was engaged by the Church Missionary Society as a missionary to Nyanza, East Central Africa, in 1882. In 1884 the diocese of East Equatorial Africa was formed, and Dr. Hannington was consecrated the first Bishop, with the charge of ten clergymen. He was captured and put to death (Oct. 1885), by order of Mwanga, the native King of Uganda, while endeavouring to find a shorter route from Mombasa, on the sea-coast, to the Victoria Nyanza Lake.

Hanover, Princess Frederica of. Baroness von Pawel-Rammingen, eldest daughter of the late King George V. of Hanover, was b. 1848, at Hanover. In 1866, when the battle of Langensalza sealed the fate of the kingdom of Hanover, and King George was obliged to take refuge in Austria, the Princess filled the duties of a secretary and amanuensis throughout her father's lifetime, he being blind. She accompanied him on his visit to England in 1876. After the death of the king (in 1878) she married Baron von Pawel-Rammingen, who became a naturalised English subject by an Act of Parliament passed for the purpose. Since her marriage and residence in this country the Princess Frederica of Hanover has obtained general favour by her genial and affable disposition, as well as by the interest she has displayed in benevolent objects, more especially in connection with institutions established for the welfare of the blind.

Hans. See CHINA.

Hapsburg, House of. See AUSTRO-HUNGARY.

Harcourt, Mr. Edward William, M.P., was b. 1825. Educated at Ch. Ch., Oxford. Married (1849) Lady Susan Harriet Holroyd, daughter of the second Earl of Sheffield. He is J.P. for Berkshire and Sussex, and Deputy Lieutenant and J.P. for Oxfordshire; High Sheriff of Oxfordshire (1875). Hon. Col. Cinque Ports Artillery Militia. Many years President of the National Artillery Association. Returned in the Conservative interest as member for Oxfordshire (1878-85); re-elected 1885.

Harcourt, Sir William George Granville Venables Vernon, Knt. (1873), M.P., P.C., LL.D., Q.C., son of the late Rev. W. Harcourt, of Nuneham Park, Oxford; was b. 1827. Educated at Trin. Coll., Cambridge, where he graduated with first-class honours in the Classical Tripos, Senior Optime (1851). Called to the bar at the Inner Temple (1854), Q.C. (1866). Appointed Whewell Professor of International Law in the University of Cambridge (1869). Sir W. Harcourt entered parliament in the Liberal interest as member for Oxford (1868-80), Derby (1880-85); re-elected 1885. He has held the following offices: Solicitor-General (1873-74); Secretary of State for the Home Department (1880-85); holds the office of Chancellor of the Exchequer in the present Gladstone administration (1886). Sir W. Harcourt married (1876, his second wife) Mrs. Ives, daughter of the late Mr. J. L. Motley, the historian, and United States Minister in London. Under the *nom de plume* of "Historicus," he is the author of the well-known letters on International Law.

Hardcastle, Mr. Edward, M.P., Headlands, Prestwich, was b. 1826. Educated at Trin. Coll., Cambridge. Returned in the Conservative interest as member for South-East Lancashire (1874-80); North Salford (1885).

Hardcastle, Mr. Frank, M.P., of Firwood, near Bolton, fourth son of the late Mr. James Hardcastle, J.P., was b. 1844. Educated at Repton School. Returned in the Conservative interest as member for South-East Lancashire, West Houghton Division (1885).

Hardinge, Charles Stewart Hardinge, 2nd Visct. (creat. 1846), was b. 1822; succeeded his father 1856. M.P. for Downpatrick (1851-56); Under-Secretary for War (1858-9). The 1st Viscount was a field-marshal, who distinguished himself throughout the Peninsular war, subsequently became Governor-General of India, served as second in command at the battles on the Sutlej, and eventually held the office of Commander-in-chief (1852-56), including the period of the Russian war; he was granted a pension of £3,000 from parliament for the lives of his next two successors.

Hardwicke, Charles Philip Yorke Harker, P.C., 5th Earl of (creat. 1754); was b. 1836; succeeded his father 1873. Served in the Indian campaign (1858-9), and received the war medal; was Controller of the Queen's Household (1866-68); Master of the Queen's Buckhounds (1874-80); M.P. for Cambridgeshire (1865-73). The 1st peer was Lord Chancellor (1736-7); his 2nd son, great-grandfather of the present peer, was also Lord Chancellor, but died suddenly, before a patent, which was in progress for creating him a peer, could be completed.

Hardwicke Stakes. See RACING.

Hardy, Gathorne. See GATHORNE HARDY.

Hare, Baron. See LISTOWELL.

Harewood, Henry Thynne Lascelles, 4th Earl of (creat. 1812), and Visct. Lascelles; was b. 1824. Deputy Lieutenant for West Riding of Yorkshire.

"**Harkaway.**" See NOMS DE PLUME.

Harker, Mr. William, M.P., was b. 1810. Manufacturer in Bradford (1837-62). Is a J.P. for the West Riding and city of Ripon. Chairman of the Bradford Banking Co. Returned in the Liberal interest as member for Ripon Division, West Riding (1885).

Harlech, William Richard Ormsby-Gore, 2nd Baron (creat. 1876), was b. 1810; succeeded his brother 1876. Was M.P. for Sligo (1841-52), and for co. Leitrim (1858-76).

Harmonium. An instrument of the free-reed kind, closely akin to the concertina and accordion, but differing from them in having an organ keyboard, and in being mounted in a fixed case with a reservoir for wind, fed by separate feeders. The reservoir has a movable base, which, being forced upwards by springs, delivers the wind to the reeds in a steady stream. When all the keys are still, no wind can pass, but pressing down a key opens a pallet over the reed, and a channel being thus freed for the wind, it rushes up through it, and in passing causes the reed to vibrate and to give forth the characteristic tone of its weight and size. In some instruments, to insure perfect rapidity of "speech," the tongues on the principal row of reeds are struck by means of a sort of small pianoforte action, called "percussion action," giving a crisp tinkling sound, which, when followed at once by the sound due to the wind, is not at all disagreeable, and gives variety of quality to the tone of that stop. The reeds are tongues of brass fitted above a stout brass frame, so that they can vibrate between the walls of the frame when set in motion by the wind, and while very nearly filling the space, yet just avoid touching the walls. By the use of much broader reeds the tone of the harmonium has been lately made much fuller and sweeter, and more organ-like than that produced by the former narrow reeds of the French makers. The *favourite stops* are: (1) Diapason bass and treble 8 ft.; (2) bourdon bass and double diap. treble; (3) clarion bass and principal treble; (4) bassoon bass and oboe treble, usually numbered as marked. In addition to these are: (E) expression, which practically annuls the steadying effect of the wind reservoir, so that according to the pressure of the feet the feeders vary the force of tone; (F) forte bass and treble, shutters which open to let the tone flow out freely; tremolo, which delivers the wind to the stop in a trembling manner, causing the tone to flicker; voix céleste two 8 ft. or 16 ft. stops, slightly out of tune so as to give a gentle and penetrating wave of beats instead of a firm tone; and sordine, a half-wind stop, and therefore soft, used principally in the bass, so that a melody played in the treble may tell out clearly. Large instruments with several rows of keys and with organ-pedals are often made for home organ practice, or for small churches.

"**Harper's Magazine.**" Originally started in America, but now published simultaneously in England by Sampson, Low & Co. (monthly, 1s.) It has an immense circulation in both countries—mainly owing, no doubt, to the high-class nature of its literary matter, as well as the beauty of its illustrations, and which, combined with those of the *Century*, have greatly tended

to improve the production of English magazines of a similar nature.

Harrington, Charles Augustus Stanhope, 8th Earl of (creat. 1742), was b. 1844; succeeded his father 1881.

Harrington, Mr. E., M.P. Returned as a Nationalist for West Kerry (1885).

Harrington, Mr. Timothy, M.P. Has been for some time engaged in journalistic work. Was b. 1850. Formerly hon. secretary of the Irish National League. Returned as a Nationalist for Westmeath (1883-85); St. Stephen's Green Division of Dublin (1885).

Harris, George Robert Canning Harris, 4th Baron (creat. 1815), was b. at St. Ann's, Trinidad, 1851; succeeded his father 1872. Has been Under-Secretary for India since June 1885. The 1st peer was Commander-in-chief at the capture of Serangapatam.

Harris, Mr. Matthew, M.P. An ex-member of the National League. Returned as a Nationalist for East Galway (1885).

Harrison, Mr. Frederic, and **Democracy**. See DEMOCRACY.

Harrison, Sir George, M.P., LL.D., was b. in Stonehaven. Secretary of the Edinburgh Chamber of Commerce (1856-63); Deputy Chairman (1863-66), and Chairman (1866-69). He was elected Lord Provost (1882). Returned in the Liberal interest as member for Southern Division of Edinburgh (1885). Died Jan. 1886.

Harrowby, Dudley Francis Stuart Ryder, P.C., 3rd Earl of (creat. 1809), was b. 1831; succeeded his father 1882. M.P. for Lichfield (1856-59), and for Liverpool (1868-82); was Vice-President of Council on Education (1874-78), and President of Board of Trade (1878-80); Lord Privy Seal (June 1885).

"**Harte, Bret**." See NOMS DE PLUME.

Hartington, Rt. Hon. Spencer Compton Cavendish, Marquis of, M.P., P.C., is the eldest son of the Duke of Devonshire, and was b. July 23rd, 1833. Educated at Trinity Coll., Cambridge, where he graduated B.A. (1854). He was returned for North Lancashire as a Liberal in 1857, and in 1859 moved the vote of non-confidence which resulted in the defeat of Lord Derby. In March 1863 he was appointed a Lord of the Admiralty, and in April of the same year Under-Secretary of State for War in Lord Russell's administration. In February 1866 he obtained cabinet rank as Secretary for War. At the general election of 1868 he was defeated in North Lancashire by the present Colonel Stanley, but shortly afterwards was returned for the Radnor Boroughs. He was appointed Postmaster-General in Mr. Gladstone's first administration, and retained that office till 1871, when he succeeded Mr. Chichester Fortescue as Chief Secretary for Ireland. On the retirement of Mr. Gladstone after his defeat in 1874, Lord Hartington was unanimously chosen as leader of the Liberal party at a meeting held at the Reform Club under the presidency of Mr. John Bright. In 1879 he was elected Lord Rector of the University of Edinburgh. At the general election of 1880 he was elected M.P. for North-East Lancashire, and was sent for by the Queen on the defeat and resignation of Lord Beaconsfield. He declined, however, to form an administration, being content to serve again under Mr. Gladstone. He became Secretary for India, but on the appointment of Mr. Childers as Chancellor of the Exchequer in 1882, his lordship returned

to the War Office. At the general election in 1885 he was returned by an enormous majority for the Rossendale Division of Lancashire. Lord Hartington, finding himself unable to give his adhesion to Mr. Gladstone's suggested Irish policy, declined to accept office in the present Liberal Government (1886).

Harvest of Europe, The (1885). Published by the committee of the International Corn Market, held at Vienna, which may be regarded as more or less accurate. The number 100 is taken as representing an average year:—

	Wheat.	Rye.	Barley.	Oats.
Austria	104	100	95	98
Baden	97	95	90	100
Bavaria	102	68	101	84
Belgium				
Denmark	110	100	90	90
France	95	95	95	100
Greece				
Holland	95	98	100	105
Hungary	117	86	108	94
Italy	79	75	65	80
Mecklenburg	100	95	100	90
Norway and Sweden	105	106	80	105
Portugal				
Prussia	94	87	92	92
Roumania	93	80	97	127
Russia	88	80	72	75
Saxony	100	85	75	70
Servia	110	85	110	115
Spain				
Switzerland	125	55	100	100
Turkey				
United Kingdom	95	—	100	95
Württemberg	101	97	97	103

Hartismere, Baron. See HENNIKER.

Hasenklever, Herr. See GERMAN POLITICAL PARTIES.

Haslett, Mr. James Horner, M.P., was b. 1832. Educated at the Royal Academical Institution, Belfast. Engaged in business as a druggist and chemist, Belfast. J.P. for Belfast. Returned in the Conservative interest as member for West Belfast (1885).

Hastings. See CINQUE PORTS.

Hastings, Baron. See LOUDOUN.

Hastings, George Manners Astley, 11th Baron (creat. 1264), was b. 1857; succeeded his brother 1875. Sir Thomas Astley, the founder of this family, fell at the battle of Evesham.

Hastings, Mr. George Woodvatt, M.P., was b. 1825. Educated at Christ's Coll., Cambridge, obtaining high honours in Law. Called to the bar at the Middle Temple (1850). He is Deputy Lieutenant and J.P. of Herefordshire, and Chairman of Quarter Sessions for Worcester-shire. Returned in the Liberal interest as member for East Worcestershire (1880-85); re-elected 1885.

Hatherton, Edward Richard Littleton, 2nd Baron (creat. 1835), was b. 1815; succeeded his father 1863. Was M.P. for Walsall (1847-52), and for South Staffordshire (1853-57).

Havelock-Allan, Lieut-General Sir Henry Marshman, Bart., V.C., C.B., M.P., b. 1830, is the son of the late Major-General Sir Henry Havelock. He married (1865) Alice, daughter of the second Earl of Ducie. He was Deputy Assistant Quartermaster in the Persian expe-

dition (1856-57); served in the Indian mutiny (1857-9)—Assistant Adjutant-General in the relief of Lucknow; New Zealand (1863-5); Assistant Quartermaster-General in Canada (1867-9), and Assistant Adjutant-General at the Irish Headquarter Staff, Dublin (1869-72). Has Persian medal, Indian Mutiny medal, and New Zealand medal, and Victoria Cross. Created C.B. (1866). General Havelock-Allan assumed (1880) the additional name of Allan by royal licence, in compliance with the will of his cousin, Mr. R. H. Allan, of Blackwell Hall, Durham. Returned in the Liberal interest as member for Sunderland (1874-81); South-East Durham (1885).

Hawarden, Cornwallis Maude, 4th Visct. (creat. 1791), was b. 1817; succeeded his father 1856. Elected a representative peer for Ireland (Dec. 1862).

Hawels, Rev. H. R., b. 1840; educated at Trinity College, Dublin, where he graduated (1861), M.A. (1864). In 1866 he was appointed to the perpetual curacy of St. James's, Marylebone, the gift of the Crown, which he still holds. He is well known as an able preacher and speaker; and also for the æsthetic character of the services held at his church. He is an author of repute, his principal works being "Music and Morals," and "New Pet, or Pastimes and Penalties," besides several pamphlets and articles on social subjects, etc.

Hawke, Rev. Edward Henry Julius, 6th Baron (creat. 1776), was b. 1815; succeeded his cousin 1870. Rector of Willingham, Lincolnshire (1854-75). The 1st peer was the celebrated Admiral Hawke.

Hawshaw, Sir John. See **ENGINEERING**.

Hay, Baron. See **KINNOUL**.

Hay, Admiral Lord J., K.C.B., holds office as one of the Naval Lords of the Admiralty in the present Gladstone administration (Feb. 1886).

Hayden, Mr. Luke Patrick, M.P. Newspaper proprietor. Returned as a Nationalist for South Leitrim (1885).

Haydn, Joseph, the great musical composer, b. 1732 at Rohran, d. at Vienna 1809. His father was a harpist and singer, though a wheelwright by trade. Haydn became a chorister at St. Stephen's in 1740. He at once turned to hard, practical work as a musician, and after a chequered career became Capellmeister to Prince Esterhazy in 1761. Henceforward his life was one long career of genial success. Haydn visited London in 1791, and produced, by engagement with Salomon, the first six of his famous twelve symphonies. Here he first heard Handel's oratorios well performed. The result was his own grand oratorios of the "Creation" (1798) and the "Seasons" (1802), as well as some fine English songs—"My mother bids me," etc. He wrote the second six symphonies for Salomon in 1792. In 1794 George III. endeavoured to induce him to reside in England. Haydn's music has always been especially dear to Englishmen, and his grandest works were written to English words. He wrote 125 symphonies, 30 trios, 77 quartets, 38 pianoforte trios, etc., etc.

Haymerle, Baron. See **AUSTRO-HUNGARY**.
"Hazard, Desiré." See **NOMS DE PLUME**.

HB Caricatures, The, are the political caricatures of John Doyle, father of "Dick" Doyle. His monogrammatic *nom de plume* was derived as follows: ID = HB. See "**His-**

tory of English Caricature," by Mr. Graham Everitt (Sonnenschein & Co.)

Headfort, Thomas Taylour, 3rd Marq. of (creat. 1880); Baron Kenlis (1831), by which last title he holds his seat in the House of Lords; was b. 1822; succeeded his father 1870.

Headley, Charles Mark Allanson-Winn, 4th Baron (creat. 1747), was b. 1845; succeeded his father 1877. Elected a representative peer for Ireland (1883).

Health Insurance Association. See **FIRE AND LIFE INSURANCE**.

Healy, Mr. Timothy Michael, M.P., b. in Bantry, 1855. Mostly educated at home, and at an early age was put to commercial pursuits. Was for several years a shorthand clerk in the secretary's office of the North-Eastern Railway at Newcastle. Became Mr. Parnell's secretary in 1880, when he was summoned by cablegram to America. In 1880 took an active part in the Land League agitation, and was arrested in the autumn on a charge of intimidation, and committed for trial. Stood for Wexford borough meantime, on the death of Mr. W. A. Redmond, and was elected without opposition. Was subsequently tried under the Whiteboy Act, but was acquitted. Took a very active part in the discussions of the Land Bill of 1881, and obtained the insertion of words excluding the improvements of tenants from rent; and the clause has since come to be known as the "**Healy clause**." Went to America after the suppression of the Land League in the autumn of 1881, in company with the Rev. Eugene Sheehy; and was present with Mr. T. P. O'Connor at a great Irish-American convention in Chicago in that year. Was charged with the use of intimidating language in a speech in 1882, and was sentenced to find bail for good behaviour, or be imprisoned for six months. Refusing bail was imprisoned, and was released after he had served four months of his sentence. Stood for county Monaghan in 1883, and after an exciting contest was elected by a majority of votes over both the Tory and Liberal candidates. At the general election of 1885 was elected for North Monaghan and South Derry; elected to sit for the latter.

Healy, Mr. Maurice, M.P., is the younger brother of Mr. T. M. Healy, member for South Londonderry. Returned as a Nationalist for Cork City (1885).

Heat is the cause of a peculiar effect on our nerves, and of various peculiar alterations produced in the condition of matter. The chief **causes** (sources) of heat are chemical energy (as in combustion), the energy of moving bodies, friction, etc. The sun's heat is supposed to be due mainly to the second of these causes—gravitation towards its centre producing a continual supply of heat. The chief **effects** of heat are as follows:—(1) It causes rise of temperature. The quantity of heat required to raise the temperature of a pound of water one degree is called the **unit of heat**. A pound of mercury is raised about thirty degrees in temperature by the same quantity of heat; the **specific heat** of mercury is therefore said to be $\frac{1}{30}$. Water has the highest specific heat of any solid or liquid; but the specific heat of hydrogen is almost 33. Hence water becomes hot or cold more slowly than most other bodies. The **temperature** of a substance (*i.e.* the intensity of the heat in it) is determined by its mass (quantity of matter in it), by the quantity of heat in it, and by its specific heat. It is not known to what tempera-

ture a substance must be cooled in order that it shall be absolutely devoid of heat; hence the quantity of heat in a body at any temperature is unknown. But we do know the quantity required to produce a change of temperature in any given case. (2) Heat causes changes in the physical condition of matter, converting solids into liquids and liquids into gases. When heat is applied to ice, the latter becomes no warmer, but is changed into water, which has the same temperature as the ice from which it was formed. The same is observed when boiling water is changed into steam. The quantity of heat which is required to melt a pound of ice, or to boil away a pound of water—and which disappears during the process, being converted into various kinds of energy, which produce the liquid state of water or the gaseous state of steam—is called the **latent heat** of water or of steam. The same quantity of heat is reproduced when water becomes ice or steam becomes water. These changes are of great service in equalising the temperature of summer and winter. (3) Heat causes a change in the space occupied by matter, generally producing an increase in volume. The **expansion** of mercury is utilised in the **thermometer**. Winds are often produced by the heating of air. (4) Heat is often converted into chemical energy, and thereby produces an alteration in the arrangement of atoms. Thus, ordinary poisonous phosphorus is converted by heat into the innocuous red phosphorus used for the manufacture of safety matches. Heat is transferred from one part of space to another by **conduction**, **convection**, or **radiation**. When it passes from one particle of matter to another without any apparent alteration in the relative positions of the particles, as when it travels along an iron bar, it is said to be conducted. But liquids and gases become heated by convection, heated particles of the matter travelling about and distributing the heat. Heat is transmitted to us from the sun by radiation through the agency of the **ether** which is supposed to be diffused through space, and to the vibrations of which it is supposed that heat, light, and electricity are due. It was at one time believed that a hot substance differs from a cold one in containing a peculiar kind of matter called **caloric**; but its existence has never been proved. The name survives in **calorimeter**, which is an instrument used to measure the quantity of heat produced in any operation, and in **calorie**, which is a name given to the unit of heat. The science of heat (**Thermotics**) is sometimes divided into **Thermostatics**, of which a brief summary has been given above, and **Thermodynamics**, or the relation of heat to other forms of energy (see **MECHANICAL THEORY OF HEAT**).

Heaton, Mr. John Henniker, M.P., was b. 1848 at Rochester. Educated at King's Coll., London. Mr. Heaton emigrated to Australia, and became an extensive landowner in New South Wales and Queensland; and afterwards entered into journalism, and published "The Australian Dictionary of Dates and Men of the Time." He was appointed by the Government of New South Wales Commissioner at the Amsterdam Exhibition (1883), and for his services received the thanks of that Government. Mr. Heaton also represented the Government of Tasmania at the Berlin International Telegraphic Conference (1883), obtaining valuable concessions. Returned in the Conservative interest as member for Canterbury (1885).

Heckling. A word used during parliamentary candidature to express the close and merciless questioning of a candidate. It is derived from Scotch "heckle," the name of a strong instrument with sharp iron teeth set in a board, used for combing and cleaning hemp, leaving only the fibre. Hence it conveys the idea of a searching examination.

"**Heiter, Amalie.**" See **NOMS DE PLUME**.

Heliograph. An instrument for communicating with distant places by means of flashes of sunlight reflected from a mirror or system of mirrors. Heliographs have been used by the British army in the recent wars in Zululand, Afghanistan, and in Egypt with marked success. In climates where a cloudless sky can be relied on, it is far superior to all other means of visual signalling. Its chief points of advantage are speed, the practically unlimited distance of the receiving station, and immunity from detection by an enemy. Moonlight has been substituted for sunlight with a partial degree of success. The instrument at present employed in the field consists of a mirror from four inches to a foot in diameter, having a horizontal as well as vertical motion, which can be communicated to it by means of two millhead screws. The motion of the sun in the heavens requires the position of the mirror to be readjusted from time to time; this is done by means of the screws, the position of the distant station being sighted through a small unsilvered hole in the mirror, and a sighting vane which carries a sighting and shadow spot. The Morse telegraph code is adopted for signalling, long and short flashes being equivalent to the dashes and dots. Practised signallers can send messages of from twelve to fifteen words in a minute.

Hemp. See **TRADE OF 1885**.

Henderson, Lieut.-Colonel Sir E. Y. W., K.C.B., who has recently resigned the chief commissionership of the Metropolitan Police, was b. 1821. Educated at the Royal Academy, Woolwich. Served in the Royal Engineers (1838-62), retiring with the rank of Lieut.-Colonel. Has held the following appointments: Controller of Convicts and Prisons in West Australia; Surveyor-General of Prisons, and Chairman of the Directors of Convict Prisons (1863); Chief Commissioner of the Metropolitan Police (1869). Col. Henderson also assisted in the settlement of the Canadian boundary, and in carrying out the Ashburnham Treaty.

Heneage, Mr. Edward, P.C., M.P., of Hainton Hall, Lincolnshire, was b. 1840. Educated at Eton. Is J.P. and Deputy Lieutenant for Lincolnshire; High Sheriff (1880). Formerly belonged to the 1st Life Guards. Returned in the Liberal interest as member for Lincoln (1865-68); Great Grimsby (1880-85); re-elected 1885, and in Feb. 1886 on taking office as Chancellor of the Duchy of Lancaster, and Vice-President of the Committee on Agriculture.

Henley, Anthony Henley Henley, 3rd Baron (creat. 1799); Baron Northampton (1885), by which title he holds his seat in the House of Lords; was b. 1825; succeeded his father 1841. M.P. for Northampton (July 1859 to Jan. 1874).

Henniker, John Major Henniker-Major, 5th Baron (creat. 1800); Baron Hartismere (1866), by which title he holds his seat in the House of Lords; was b. 1842; succeeded his father 1870.

Henley Regatta.

GRAND CHALLENGE CUP (EIGHT OARS).

Year.	Won by	M. S.
1872	London R. C.	8 38
1873	London R. C.	7 58
1874	London R. C.	7 42
1875	Leander R. C.	7 19
1876	Thames R. C.	7 27
1877	London R. C.	8 16½
1878	Thames R. C.	7 41
1879	Cambridge, Jesus College	8 39
1880	Leander R. C.	7 3
1881	London R. C.	7 24
1882	Oxford, Exeter College . .	8 11
1883	London R. C.	7 51
1884	London R. C.	7 27
1885	Cambridge, Jesus College .	7 22

DIAMOND SCULLS.

Year.	Won by	M. S.
1872	C. C. Knollys, Oxford . . .	10 48
1873	A. C. Dicker, Cambridge . .	9 45
1874	A. C. Dicker, Cambridge . .	10 47
1875	A. C. Dicker, Cambridge . .	9 15
1876	F. L. Playford, Lond. R. C. .	9 28
1877	T. C. Edwards-Moss, Oxford .	10 20
1878	T. C. Edwards-Moss, Oxford .	9 37½
1879	J. Lowndes, Oxford	12 30
1880	J. Lowndes, Derby	9 10
1881	J. Lowndes, Derby	9 28
1882	J. Lowndes, Derby	11 43
1883	J. Lowndes, Derby	10 2
1884	W. S. Unwin, O. U. B. C. . .	9 43
1885	W. S. Unwin, O. U. B. C. . .	

"Henry, Camille." See NOMS DE PLUME.

Henry, Mr. Mitchell, M.P., F.R.C.S.E., was b. 1826. Educated at Univ. Coll., London. He relinquished the medical profession (1862), and entered, as partner, the firm of A. and S. Henry and Co., of Manchester and Glasgow. J.P. for Galway Co., Middlesex, and Westminster, and Deputy Lieutenant for Middlesex. Returned in the Liberal interest as member for Galway Co. (1871-85); Blackfriars and Hutesontown Div., Glasgow (1885).

Herat. A town of 50,000 inhabitants, about 100 miles from the new Russian position on the Afghan frontier, 600 from Cabul, 360 from Candahar, and 514 from Quetta. Its immense strategical value has long been recognised by the ablest Russian and English generals. In Russia it is significant that no military writer has ever questioned the belief of Skobelev, Kaufmann, Tchernayeff, and other generals, as to its value as a place of arms for coercing India in time of peace, and attacking it on an outbreak of war. To explain fully why they consider it the key of India would occupy too much space. Briefly their argument is this. About 100,000 Englishmen govern the 250,000,000 people of India. Their presence is tolerated, but they are not so greatly beloved, that if Russia defeated them, India would rise *en masse* for their behalf. England could only detach some 50,000 troops to hold the Afghan

frontier. If Russia could locate 150,000 men alongside that force the chances are that she would defeat it. Russia aims, therefore, at securing this proximity to India. The vast resources of the Volga, and the yearly improving railway communication with the Caspian, enable her already to easily assemble 150,000 men and supplies in the Caspian Sea; but between the Caspian and Herat there is no place where so large a body of troops can be located and fed on local resources. If, however, the Herat district were gained, sufficient supplies could be obtained, and one of the healthiest camping grounds in Asia secured, which could be rapidly developed into a place of arms of immense strength. Here Russia could mass her attacking army of 100,000 men, while secretly fomenting an outbreak in India, and if she suddenly declared war, that force would reach the English Candahar outposts in a few quick marches, instead of her having to commence the campaign by despatching that number from the Caspian—an operation consuming many weeks, and allowing time for reinforcements to be despatched from England. To surrender Herat is, therefore, to give Russia the means of swiftly shattering our military supremacy in India, and for this reason Herat is named by strategists the "Key of India." This appellation includes not merely the fortress, which is not very strong, but the whole district of Herat. The country is as fertile as Italy, as full of minerals as England, and the climate is suitable for a European garrison, having none of the enervating effects of India.

Herbert, The Hon. Sidney, M.P., second son of the late Lord Herbert of Lea, was b. 1853. Educated at Eton and at Ch. Ch., Oxford, where he graduated B.A. (1876). Formerly captain in the Royal Wilts Yeomanry Cavalry. Married (1877) Lady Beatrix Lambton, eldest daughter of the second Earl of Durham. Sat in the Conservative interest as member for Wilton (1877-85). Returned for Croydon (Jan. 27th, 1886), in place of Mr. W. Grantham, Q.C. (creat. Judge, 1886). Mr. Herbert was the first member returned after the assembling of the new Parliament.

Herbst, Dr. See AUSTRIAN POLITICAL PARTIES.

Heredity. The tendency to recurrence in descendants of certain living beings of structural and functional [anatomical and physiological] conditions similar to those that have obtained in the ancestral forms. The likeness between parents and children, the transmission of disease, such as insanity, gout, alcoholism, are familiar examples of a process very widely extended. The laws of heredity are but little understood. 1. Its cause, *e.g.*, is still in doubt, though the provisional hypotheses of *pangenesis* (Darwin), and *perigenesis* (Haeckel-*q.v.*), regeneration of organic molecules (Elsberg), continuity of the germ plasma (Weissmann), are suggestions in this connection (see PANGENESIS). 2. There is a tendency to inherit particular characters at the same age as they appear in the ancestor. 3. There is evidence of sexual heredity—*i.e.*, certain characters are in many cases transmitted to the male or to the female descendants only. 4. Transmission and development of a characteristic are by no means one and the same thing. They often go together, and thus escape discrimination; but they are distinct powers, as we see when a peculiarity re-

appears in a descendant after it has lain dormant for many generations. Nay, in some cases transmission and development are antagonistic, the one acting in one generation, in which the peculiarity lies dormant, the other acting in the next, in which the peculiarity appears. 5. Heredity has its antagonists. Hostile conditions of life, variation, reversion, may all oppose it. The two former come together under the general head of adaptation of the individual to his environment. **Reversion** or **atavism** (*atavus* = ancestor), or throwing back, **Pas-en-arrière**, **Rückschlag**, is only a particular case of heredity. It is the re-appearance in a plant or animal of some structural or functional peculiarity that was characteristic of a remote ancestor, but has not, as a rule, appeared in the intermediate forms. Examples are, the production from the eggs of any of the many varieties of pigeon of a blue rock pigeon (the ancestral form of all); the appearance of horses bearing zebra stripes; the birth of microcephalous (small-brained) idiots as the children of normal human parents. Reversion may interfere with the inheritance of more recent characteristics. Adaptation to the environment, which acts upon the individual, and heredity in its widest sense, as including reversion, explain the majority of the anatomical and physiological facts in connection with plants and animals. (Books of reference: Darwin's "Origin of Species," chap. i., sect. 2, chap. iv., sect. 1; "Animals and Plants under Domestication," chaps. xii., xiii., xiv.; Haeckel's "Pedigree of Man," lecture on "Perigenesis of the Plastidule"; Weissmann's "Die Kontinuität des Keimplasms als Grundlage einer Theorie der Vererbung.")

Hereford, Right Rev. James Atlay, D.D., 95th Bishop of (founded 676); b. 1817. Educated at St. John's Coll., Cambridge: Bell's university scholar (1837), Senior Optime and first class in classical tripos (1840), Fellow of his College (1842). Deacon (1842); priest (1843); vicar of Madingley, Cambridgeshire (1846-52); Queen's Preacher at the Chapel Royal, Whitehall (1856-58); vicar of Leeds (1859); Canon of Ripon (1861); consecrated Bishop of Hereford (1868).

Hereford, Robert Devereux, 16th Visct. (creat. 1550); b. 1843; succeeded his father 1855. Is premier Viscount of England.

Heriots were the right of the lord of the manor to seize a certain number of a deceased tenant's horses and arms. It originated in the lord lending his vassal a horse and armour for life, which again reverted to him on his death. There are three kinds of heriots: (1) **Heriot service**, giving right to the best beast of a tenant dying possessed of an inherited estate; (2) **Suit Heriot**, giving right to the best chattel of a deceased tenant, reserved under a lease of freehold lands; (3) **Heriot Custom**, which is not limited to either of the above, and is a matter of individual custom. (1) is recoverable by seizure or distress, (2) by distress or action, (3) by the established local custom. In many cases heriots on land have been bought up; and either the lord or the tenant is entitled to demand this.

Herodotus. See ASSYRIOLOGY.

Heron-Maxwell, Sir John, d. in a London omnibus, Aug. 22nd, 1885. He was b. in 1808. Educated at the Royal Naval Coll., and (1821) entered the navy, from which he retired with the rank of Commander (1864).

Herries, Marmaduke Constable Maxwell, 12th Baron (creat. 1491); Baron Herries (1884), by which title he sits in the House of Lords; b. 1837; succeeded his father 1876.

Herschell, Farrer, P.C., 1st Baron (creat. 1886), was b. 1837. Educated at Univ. Coll., London, and Univ. of Bonn. Called to the bar at Lincoln's Inn (1860), Q.C. (1872); Bench of his Inn (1872); Recorder of Carlisle (1873); Solicitor-General (1880), when he received the honour of knighthood. Raised to the peerage on his appointment as Lord Chancellor in the present Gladstone administration (1886).

Hertford, Hugh de Grey Seymour, 6th Marq. of (creat. 1793); b. 1843, succeeded his father 1884. M.P. for co. Antrim (1869-74), and for South Warwickshire (1874-80). The 1st peer was son of Sir Edward Seymour, who was Speaker of the Long Parliament.

Hervey, Lord Francis, M.P., M.A. (Oxon), fourth son of the second Marquis of Bristol, was b. 1846. Educated at Eton, and Balliol Coll., Oxford, where he graduated first-class in Classics (1865); elected a Fellow of Hertford College (1865). Called to the bar at Lincoln's Inn (1862). He is J.P. for Suffolk. Returned in the Conservative interest as member for Bury St. Edmunds (1874-80); re-elected 1885.

Herzog, Dr. See OLD CATHOLICS.

Heytesbury, William Henry Ashe A Court-Holmes, 2nd Baron (creat. 1828); b. 1809; succeeded his father 1860. M.P. for the Isle of Wight (1837-47). The 1st peer was a distinguished ambassador, Lord-Lieut. of Ireland.

Hibbert, Mr. John Tomlinson, P.C., M.P., was b. 1824. Educated at Shrewsbury School and St. John's Coll., Cambridge. Called to the bar at the Middle Temple (1849). He is Deputy Lieutenant and J.P. of Lancashire, and chairman of the Visiting Justices of Salford House of Correction. Has held the following official appointments: Parliamentary Secretary to the Local Government Board (1872-74 and 1880-83), for the Home Department (1883-84), Financial Secretary to the Treasury (1884-85). Returned in the Liberal interest as member for Oldham (1862-74, 1877-85); re-elected 1885. Holds office as Secretary to the Admiralty in the present Gladstone administration (1886).

Hickman, Mr. Alfred, M.P., was b. 1830. Educated at King Edward VI.'s Gram. Sch., Birmingham. He is a member of the Council of the Mining Assoc. of Gt. Britain, the Iron and Steel Institute, and the Cleveland Institute of Engineers. Chairman of the Staffordshire Steel and Ingot Iron Co. Returned in the Conservative interest as member for West Wolverhampton (1885).

Hicks-Beach, Right Hon. Sir Michael Edward, P.C., M.P., D.C.L., b. 1837. Educated at Eton and Christ Church, Oxford (B.A., 1st class Law and Mod. Hist., 1858; M.A. 1861; Hon. D.C.L. 1878). Is a J.P. and Deputy Lieutenant for Gloucestershire. Sat in the Conservative interest as member for East Gloucestershire (1864-85); West Bristol (1885). Has held the following official appointments: Parliamentary Secretary to Poor Law Board (March to Aug. 1868); Under-Secretary for Home Office (Aug. to Dec. 1868); Chief Secretary for Ireland (1874-78); Secretary of State for Colonies (1878-80); Chancellor of the Exchequer in the late Salisbury administration. Appointed to Committee of Council on Education (1885). The additional surname of Beach was assumed by his grandfather.

/Hicks, Dr. See GEOLOGY.

Hicks Pasha, b. 1831. He began his service in the Bombay Fusiliers (1849), and served in the Indian mutiny. Was employed on the staff until the Abyssinian war, during which period he held the post of brigade-major. Subsequently became chief of the staff to Suleiman Pasha, and met his death in the Soudan, where he and his army were cut to pieces by the Mahdi's troops (1883).

"Hieover, Harry." See NOMS DE PLUME.

Hieroglyphics, Egyptian. See EGYPTOLOGY.

"Highfyer." See TATTERSALL'S.

High Church. See ESTABLISHED CHURCH.

Highland Land Bill. See CROFTERS.

Hilgers, Prof. See OLD CATHOLICS.

Hill, Lord Arthur William, P.C., M.P., son of the 4th Marquis of Downshire, was b. 1846. He was for some time an officer in the 2nd Life Guards; Lieut.-colonel 2nd Middlesex Artillery Volunteers. Heir presumptive to the Marquess of Downshire. J.P. for Sussex, co. Down, and Berks. Returned in the Conservative interest as member for co. Down (1880-85); re-elected, West Down (1885).

Hill, Mr. Alexander Staveley, Q.C., M.P., was b. 1825. Educated at King Edward's Gram. Sch., Birmingham, and St. John's Coll., Oxford, where he was for a time Fellow. Called to the bar at the Inner Temple (1851); Q.C. (1868); Examiner in Law and Modern History at Oxford University (since 1858). Appointed Recorder of Banbury (1866). He is J.P. and Deputy-Lieutenant for Staffordshire, and Standing Counsel to the Admiralty and Judge-Advocate of the Fleet. Returned in the Conservative interest as member for Kingswinford Division of Staffordshire (1885).

Hill, Rowland Clegg Hill, 3rd Visct. (creat. 1842); b. 1833; succeeded his father 1875. Was M.P. for North Shropshire (1857-65). The 1st Visct. was a distinguished general, who received his peerage after the battle of Almaraz.

Hillingdon, Charles, of Hillingdon Court, Middlesex, 1st Baron (creat. 1880), the title by which Sir Charles Mills has recently been raised to the peerage. He is J.P. for Kent, Westminster, and Middlesex, and Deputy Lieutenant for the latter county. Formerly represented West Kent in the Conservative interest.

Hillsborough, Earl of. See DOWNSHIRE.

Hindlip, Baron Henry, 1st Baron (creat. 1860), of Hindlip in the county of Worcester and of Allsopp-en-le-Dale in the county of Derby, formerly known as Sir Henry Allsopp; raised to the peerage Feb. 1886.

Hingley, Mr. Benjamin, M.P., was b. 1830. Head of the firm of Messrs. Noah Hingley and Sons, colliery proprietors and ironmasters, of Netherton. He is J.P. for Staffordshire and Dudley, and Chairman of the South Staffordshire Ironmasters' Association. Returned in the Liberal interest as member for North Worcestershire (1885).

"Historical Review, English," a new "quarterly," the first number being published Jan. 1886, devoted to the treatment of history and historical research from a critical and philosophical standpoint. A list of the newest European works bearing upon historical subjects is also given. Amongst the contributors to the first number were Professors Seely and Freeman, the Provost of Oriel, and Mr. Munro. Editor: Professor Creighton.

Hittite Inscriptions. See BIBLICAL ARCHEOLOGY.

Hobart (Pasha), The Hon. August Charles, son of the late and uncle of the present Duke of Buckinghamshire, was b. 1823. Entered the Royal Navy in 1836, and in reward for distinguished services in the suppression of the slave trade on the Brazilian coast was (1845) appointed to one of the Royal yachts. He served with the Baltic fleet as commander of H.M.S. *Driver* during the Russian war, and was mentioned in dispatches for his gallant conduct at the storming of Bomarsund and the attack on Abo. In 1868 he was appointed to an important command in the Turkish navy, and in the following year was sent with a squadron to suppress the Greek blockade runners at Crete. For services here and off Syra he was decorated by the Turkish, Austrian, and French Governments, and on his return to Constantinople was made a Pasha and full admiral of the Ottoman fleet. During the Russo-Turkish war Hobart Pasha distinguished himself by sailing down the Danube under the fire of the Russian guns. He has since been restored to his former rank in the British navy.

Hobhouse, Arthur Hobhouse, P.C., K.C.S.I., C.I.E., 1st Baron (creat. 1885); b. 1819. Educated at Eton and at Balliol Coll., Oxford, where he gained a 1st class in classics (1841); became a member of the Chancery bar, (1844), and a Queen's Counsel (1865); a Charity Commissioner (1866); a Commissioner of Endowed Schools (1869); was the legal member of the Governor-General's Council of India (1872-77), and on his retirement created K.C.S.I.; appointed a member of the Judicial Committee of the Privy Council (1881). Unsuccessfully contested Westminster (March 1880); was a member of the London School Board (1882-84).

Hobhouse, Mr. Henry, M.P., was b. 1854 at Hadsden House, Somerset. Educated at Eton and Balliol Coll., Oxford, where he took first-class classical honours (1875). Called to the bar (1880). Author of a work on the Corrupt Practices Act. Returned in the Liberal interest as member for East Somerset (1885).

Hodgson, Shadworth H. See ARISTOTELIAN SOCIETY.

Hodson, Mr. See ENGRAVING, AUTOMATIC.

Hohenwart, Count. See AUSTRIAN POLITICAL PARTIES.

Holden, Mr. Angus, M.P. Educated at Edinburgh and Wesley Coll., Sheffield. Entered his father's business at Bradford and in France (1847); Mayor of Bradford (1880). Returned in the Liberal interest as member for East Bradford (1885).

Holden, Mr. Isaac, M.P., was b. 1807. Is a manufacturer, having works at Bradford, Rheims and Roubaix, in France. He is a Deputy Lieutenant and J.P. for the West Riding. Returned in the Liberal interest as member for Knaresborough (1865-68); North-West Riding (1882-85); re-elected, Keighley Division (1885).

Holland. Kingdom under William III. of the House of Orange. Constitution of 1848 vests executive in the king and legislative authority in the States-General, sitting in two chambers. The first, consisting of 39 members, elected by the provincial states. The second, of 86 members, elected by ballot, 1 to every 45,000 population. Every two years one-half of the second, and every three years one-third of the first chamber retires by rotation, unless dissolved by the king, in which case new elections must take place within forty days. The second

chamber alone possesses the initiative in legislation; the upper house having the right of approval or rejection, but not of amendment. The king has a veto. Alterations in constitution to be made by two-thirds vote of both houses, followed by a general election, and confirmation by a similar vote of the new States-General. Entire liberty and social equality granted to all religions. Revenue for 1884 £9,475,000, expenditure about £11,938,000; national debt about £90,000,000. The army at home, 65,000, with a reserve of 77,000. The colonial army 40,000, about 19,000 of which are Europeans. The navy composed of 23 ironclads and 134 other vessels. Area, including Luxemburg, 13,646 square miles; pop., 4,434,000. Colonies include Java and territories in Sumatra, Borneo, and numerous other islands in Eastern Archipelago; Curaçoa and five other small islands in the West Indies, and Surinam in South America.—1870. Neutrality in Franco-German war maintained. In 1871 certain territories in New Guinea were ceded to Great Britain. By treaty in 1872 restrictions to their progress in Sumatra were removed, and in consequence a war with the Achinese broke out in 1873, and continued with varying results, but mainly in favour of the Dutch, until 1879. A new penal code was promulgated in 1875. A canal between the North Sea and Amsterdam opened in November 1876. The king's brother and heir apparent married August 1878.—1879. King William III. married Princess Emma of Waldeck. Prince of Orange died June 11th, his brother becoming heir apparent. Fall of Liberal cabinet of Van de Coppel, succeeded by Coalition cabinet of Van Lynden. Achin war terminated, the Dutch obtaining from the Sultan a general recognition of their authority.—1880. New criminal code passed. Difference between Holland and Luxemburg administration as to amount of national debt to be assumed by the latter finally composed. War in Sumatra again broke out. The colonial budget was satisfactory.—1881. Government tendered friendly offices to promote understanding between Great Britain and the Boers. Discussion on proposal to establish customs' union with Belgium.—1882. Franco-Dutch commercial treaty rejected in Chambers. Ministry tendered resignation, which the King refused to accept. In autumn, however, a temporary convention was concluded and approved by Chamber. Discussions on fortifications and organisation of the army, and on the succession to the throne. Outbreaks took place in Achin.—1883. Resignation of ministers upon a question of electoral reform. Coalition cabinet under Heemskerk formed. A commission was named to report on scheme for revision of the Constitution. International Exhibition at Amsterdam.—1884. Death of Prince of Orange, last male descendant of House of Nassau; King having one daughter by second marriage. Revision of Art. 198 of constitution, providing that no change in order of succession to throne should be made during regency; passed States-General, who confided regency to the Queen. English S.S. *Nisero* wrecked, and crew seized by Rajah of Tenem. The Dutch expedition proved a failure. England proposed to unite with Holland in punishing Rajah, who eventually submitted. A guerrilla war in Achin. With the exception of some disturbances in Amsterdam following the conviction of one Van Ommeren, a leading Socialist, for libelling

the King, and a bill revising the East Indian tariff and increasing the duties from 6 to 10 per cent., nothing of interest remains to be noted except the debate on the revision of the Constitution in the Dutch Second Chamber (March 17th, 1886).

Holland, Sir Henry Thurstan, Bart., P.C., M.P., K.C.M.G., son of the late Sir H. Holland, Physician to the Queen, was b. 1825. Educated at Harrow and Trin. Coll., Cambridge. Called to the bar at the Inner Temple, of which he is a Benchet (1849). For some years permanent assistant Under-Secretary of State for the Colonies. Appointed Financial Secretary of the Treasury (1885), being soon afterwards transferred to the office of Vice-President of the Committee of Council on Education. He is a Deputy Lieutenant for Middlesex. Returned in the Conservative interest as member for Midhurst (1874-85); Hampstead (1885).

Holland House. See LAND QUESTION.

Holmes, Mr. Hugh, Q.C., M.P., was b. 1840. Educated at Trin. Coll., Dublin. Called to the Irish bar (1865); created Q.C. (1877); Solicitor-General for Ireland (1878-80); and was appointed Attorney-General (1885). Returned in the Conservative interest as member for Dublin University (1885).

Holmesdale, Visct. See AMHERST, BARON.

Holmgren's Coloured Wools. See COLOUR BLINDNESS.

Holy Alliance, The, was an international treaty, formed directly and personally between the sovereigns of Russia, Austria and Prussia, whom all the European Powers joined, excepting only Great Britain, the Pope, and Turkey, to whom the treaty was naturally not offered for signature. Its object was to bind the subscribing powers together in brotherly love and charity as one Christian family, to regulate the government of the three great states representing Christianity and the Greek and Roman Churches by the spirit and genius of Christendom, and to unite them in a common union overstepping the differences of their religions, and recognising their fundamental mainspring.

Holy Thursday (otherwise called Ascension Day). The fortieth day after Christ's resurrection.

Home Arts Association, established about the beginning of 1885, having been previously at work in a small way under the title of "**The Cottage Arts Association**," founded and promoted by Mrs. Jebb. Its offices and studios are at 1, Langham Chambers, W.; and it has already seventy-three "centres" all over the country, from Whitechapel to Braemar. Lord Brownlow is its president, and amongst its vice-presidents are many eminent artists, such as Sir Frederick Leighton and Mr. G. F. Watts, and other philanthropists. Its immediate objects are to rouse the intelligence, educate the eye and train the hand, and at the same time to raise the standard of everyday life and ennoble the idea of *home*, by means of teaching to the poorer classes such arts and handicrafts as must be elevating and may be remunerative, from joinery and wood-carving to tile-painting, pottery, and *repoussé* work in brass and copper. The Association hopes to secure many voluntary teachers, and financial aid from the public.

Home, Charles Alexander Douglas Home, 12th Earl of (creat. 1604); Baron Douglas (1875), by which title he holds his seat in the House of Lords; b. 1834; succeeded his father 1881.

Home Office. See CIVIL SERVICE.

Home Produce, Exports of. See **TRADE** or 1885.

Home Rule. The term applied to the movement for the restoration of self-government in Ireland, which was started by Mr. Isaac Butt, in Dublin, in 1870. The new movement, which in most respects had the same objects as the agitation of O'Connell for repeal of the Union, obtained at the general election of 1874, sixty members. The party was afterwards divided on policy, Mr. Parnell (*q.v.*) and Mr. Biggar advocating a more active course than Mr. Butt approved. Mr. Butt died in 1879, and Mr. Shaw was elected leader of the Home Rule party in his stead. After the general election of 1880, at which the party was largely augmented, Mr. Parnell was elected in place of Mr. Shaw. Home Rule has various meanings—different proposals being made at different periods, and by different leaders. The plan of Mr. Butt was to allow a parliament in Dublin, and at the same time to have the Irish members summoned to the Imperial Parliament at Westminster whenever questions arose affecting the relations of Ireland with the Empire. Since then various members of Mr. Parnell's party have signified a preference for the model of the colonies—that is to say, a parliament in Dublin and no representation in the Imperial Parliament, and no share in Imperial taxation. Mr. Gladstone has in contemplation a scheme of Home Rule, the details of which are not yet fully divulged (Mar. 27th, 1886), but which are to be announced on April 8th.

Home Rule Party, The. See **IMPERIAL PARTIES (ENGLISH).**

Honduras. See **ARBITRATION, INTERNATIONAL.**

Hong Kong. See **BRITISH COASTING STATIONS.**

Hood, Francis Wheler Hood, 4th Visct. (creat. 1796); b. 1838; succeeded his father 1846. The 1st Visct. was a famous admiral.

Hooper, Mr. John, M.P., was b. 1846. He has been connected with the *Cork Herald* since 1861. Returned as a Nationalist for South-East Cork (1885).

"Hope, Ascott R." See **NOMS DE PLUME.**

Hope, Beresford. See **BERESFORD-HOPE.**

Hopetoun, John Adrian Louis Hope, 7th Earl of (creat. 1703); Baron Hopetoun (1809), Baron Niddry (1814), by which last two titles he sits in the House of Lords; b. 1860; succeeded his father 1873. Has been a Lord-in-waiting to the Queen since June 1885. The 4th Earl, for his services in the Peninsular war, was created Baron Niddry.

Hop Trade. The hop (*Humulus lupulus*) is a perennial plant, the seed-bearing cones of which, when fully ripened, form the hop of commerce, and are universally used in brewing, with the object of—(1) imparting a peculiar aromatic and bitter flavour to beer; and (2) by the antiseptic power of the lupuline contained in resinous glands at the base of the strobiles to increase the durability of beer in soundness. It is because of the co-existence of two such distinct qualities as agreeable flavour and resistive action against putrefaction that the exceptional value of the hop is due, there being no other substance known which naturally possesses the same characteristics. The pleasant aroma of the hop, and also its antiseptic power, become so weakened by age that, unless diseased and inferior in quality, a new season's growth commands higher prices than the

produce of previous years. While growing, the hop plant is very sensitive to atmospheric influence, and liable to great variations in the healthiness of its condition. It is likewise subject to serious injury, amounting occasionally to nearly a total destruction of the entire crop by insects, the most harmful of which is a species of fly—the *aphis humulus*. The uncertainty attending the cultivation of hops and the consequent incentive to speculation may be realised by the very different results of some successive years. In 1854 the yield per acre was only 1 cwt. 2 qrs. 15 lb. In the next season (1855) it was 12 cwt. 3 qrs. 15 lb. In 1859 the product averaged 13 cwt. 1 qr. 15 lb., and was followed in 1860 by a crop of but 2 cwt. 0 qr. 15 lb., and that so bad in quality from disease as to be intrinsically worthless. An average crop, taking fifteen years' production as the basis, is rather less than 7 cwt. per acre in England and America, and under 6 cwt. in Germany and other hop-producing countries on the continent of Europe. In 1710 a duty (3d. per lb.) was, for the first time, levied upon all hops imported from foreign countries, and in 1734 one of 1d. per lb. was imposed upon hops grown in England. These duties, with occasional alterations in the rates, were continued until 1862, when they entirely ceased. The plantations of England in 1855 covered 57,757 acres. This was the largest extent then recorded. In 1861 (the last duty-paying year) there were only 47,941 acres so used. Since 1861, notwithstanding severe foreign competition, the acreage under hops has increased, until in 1885 71,314 acres were so employed, this area being equal to about one-fourth of the land appropriated for the purpose throughout the world. The imports of hops into England in the seven years preceding the total repeal of the duties amounted to 292,674 cwt., but of this quantity at least two-thirds were owing to the great failure of the English crop in 1860. In the first seven years of entirely free trade in hops (1862-68) the imports rose to 1,075,931 cwt., or a yearly average of 153,704 cwt.; and in the seven years ending with 1885 they amounted to 1,579,081 cwt., or a yearly average of 225,583 cwt. (For statistics for 1885, see **APPENDIX**).

Horners, The Worshipful Company of. See **CITY GUILDS.**

Horsford, General Sir Arthur Hastings, G.C.B., d. Sept. 13th, 1885. He entered the army in 1833. He served with the Rifle Brigade in the Kaffir war of 1846-7, and commanded the 1st battalion of the same regiment in the Kaffir war of 1852-3. On the outbreak of the war in the East in 1854 he was again in command of the 1st battalion, and was present at the battles of the Alma, Balaklava, and Inkerman, and also at the siege of Sebastopol. In the Indian campaign of 1857-9 he was in command of the 3rd battalion of the Rifle Brigade at the battle of Cawnpore, and was brigadier in command of the Trans-Gurga force in Oude.

Hoskins, Vice Admiral Sir A. H., K.C.B., is a Naval Lord of the Admiralty in the present Gladstone administration (Feb. 1886).

Hotchkiss Gun. See **ARTILLERY.**

Hotchpot. In cases where property is settled on children, or other associated individuals, subject to power of appointment amongst them, and where part of it is appointed to one of them, that one is not thereby legally cut off

from his full original share with the others in the property that remains unappointed, unless it is specially provided in the deed of settlement that every or any appointee who shall take a share in the unappointed property shall bring his appointed share into hotchpot. The **Statute of Distribution** (22 & 23 Car II., c. 10) provides similarly with respect to advances made to a child during the lifetime of an intestate parent.

Hothfield, Henry James Tufton, 1st Baron (creat. 1881; b. in Paris 1844. Was naturalised with his father Sir Richard Tufton, Bart. (1849). Holds the office of Lord-in-waiting (Mar. 1886).

"**Hotspur.**" See **NOMS DE PLUME**.

Houghton, Robert Monckton Milnes, 1st Baron, b. June 1809; graduated at Cambridge (1831), after which he devoted some years, to travel. In 1837 he was elected M.P. for Pontefract, which borough he represented in the Liberal interest till August 1863, when he was raised to the peerage. At the outset of his parliamentary career he was a Peelite, and he supported the great Conservative statesman in repealing the corn laws, but gradually joined the Whig party. Though on several occasions urged to take office in the Liberal Government he preferred to pursue his efforts towards social reform independently. He was one of the earliest advocates of a national system of education, and a firm supporter of all questions of social amelioration. Though paying attention to foreign affairs, his name is more particularly identified with the reform of the Penal Laws. In 1846 he introduced the first bill for the establishment of reformatories, and his efforts in this cause led to his selection as President of the Norwich meeting of the Social Science Congress in 1873. He was, in 1881, chosen as successor to Thomas Carlyle as President of the London Library. His lordship was Hon. D.C.L. of Oxford, LL.D. of Edinburgh; F.R.S. (1868); Foreign Secretary of the Royal Academy of Arts, Trustee of British Museum, and a Grand Dignitary of the Brazilian Order of the Rose. As a writer he published several volumes of meditative poetry. In 1848 he edited the "Life of John Keats," and in 1873-76 he published his "Monographs, Personal and Social"; and was also the author of many pamphlets, political and theological. In 1851 he married the Hon. Annabella Crewe, daughter of Lord Crewe, and had issue, a son and two daughters. He died August 11th, 1885.

Houghton, Robert Olmley Ashburton Milnes, 2nd Baron (creat. 1863; b. 1858; succeeded his father 1885. Was private sec. to Earl Granville (1883-4). Holds the office of Lord-in-waiting (1886).

Houldsworth, Mr. William Henry, M.P., of Norbury Booth's Hall, Knutsford, son of the late Mr. Henry Houldsworth, of Coltness, N.B., was b. 1834. Educated at St. Andrew's Univ. Has been for some time engaged in commercial pursuits as a cotton-spinner at Manchester. Member of the Royal Commission on Trade Depression. Returned in the Conservative interest as member for Manchester (1883-5); re-elected 1885.

House, Adjournment of the. See **PARLIAMENTARY PROCEDURE**.

House of Commons. With certain exceptions any male of full age may be elected to represent a constituency in the House of Commons. English and Scotch peers are entirely disqualified, but Irish peers may be returned for any constituency in Great Britain.

All English, Scotch and Irish judges, except the Master of the Rolls in England; clergymen of the Established Church of any of the three kingdoms; Roman Catholic priests; the holders of various offices specially excluded by statute—including revenue officers, persons who have been convicted of certain offences, aliens who have been naturalised (except in special cases where exceptions are made), imbeciles, government contractors (except contractors for government loans), and sheriffs and returning officers within the constituencies for which they act—are all disqualified. No candidate requires any property qualification, and no member receives any payment or allowance whatsoever from the country for his service in the House or on any committee thereof. The Speaker is the first to take the oath and subscribe the roll in a new House of Commons, and is followed by the other members, who come to the table without any ceremony, and are presented to him by the clerk. Members returned after a general election are introduced by two other members. The form of oath taken is as follows:—"I, —, do swear that I will be faithful and bear true allegiance to Her Majesty Queen Victoria, her heirs and successors, according to law. So help me God." Quakers, Moravians, Separatists, and others are permitted to make an affirmation to the same effect as the oath; and under a standing order passed in 1880, any member returned who may claim to be a person for the time being by law permitted to make an affirmation instead of taking an oath may make such affirmation subject to any liability by statute. Until 1837 the roll subscribed by members was really a roll of paper, but since that date books have been used for the purpose. A few years ago a valuable return was made to the House of all the members who had sat for hundreds of years before, and was printed and sold as a parliamentary paper. A seat in the House is vacated when the holder is created a peer or succeeds to the peerage by death or by the acceptance of any office of profit under the Crown; and there are also certain disabilities attached to bankruptcy (see **PRIVILEGES OF PEERS**, etc.). All the principal members of the government, on accepting office, vacate their seats and are eligible for re-election; but the rule does not apply to such offices as Secretary to the Treasury or other similar appointments which are not held direct from the Crown; and a change from one office to another does not involve going again to the constituency. In theory a member cannot resign, but he can accept the office of honour or profit under the Crown of the stewardship of the Chiltern Hundreds, or of the manors of Northstead, which is granted to him by the Chancellor of the Exchequer, and resigned immediately its purpose is served. The Act of Union with Ireland increased the number of the House of Commons to 658, and though it stood nominally at this figure until the end of the last parliament, the disfranchisement of four constituencies returning 6 members, and the suspension of 12 writs in 7 cities and boroughs, had reduced the total of members to 640. The Redistribution Act (q.v.) did not alter the apportionment of members to Ireland or Wales, but increased the number returnable by Scotland from 60 to 72, and these 12 new seats being added to the nominal number of the House brought it up to 660. The number of

members returned and the state of parties at the close of the last parliament is shown at a glance in the table (given in APPENDIX). In the number of Conservatives elected in Ireland are included two gentlemen who were understood to be moderate Home Rulers, but who always sat with the Conservatives and gave them a general support. The moderate Home Rulers sat with the Liberals and mostly voted with them. The table (in APPENDIX) shows how the seats were redistributed between the boroughs and counties and the number of members of each political party returned by constituencies. In regard to the four gentlemen classed as Independents—viz., Sir E. Watkin, Mr. Cowen, Mr. Corbet (Droitwich), and Mr. Fitzwilliam—it may be mentioned that they were understood to rank as Liberals in the last parliament; and if they were reckoned with the Liberals in the following table, that party would number as many as the Conservatives and Parnellites combined. (See also PARLIAMENTARY PROCEDURE.)

House of Commons, Principal Officers of.

Chairman of Ways and Means—L. H. Courtney, Esq., M.P.

Clerk of the House of Commons—Right Hon.

Sir T. Erskine May, P.C., K.C.B.

Clerk Assistant—R. F. D. Palgrave, Esq.

Second Ditto—A. Milman, Esq.

Principal Clerks :—

W. Rose, Esq., *Public Bills and Fees*.

G. J. Stone, Esq., *Committee Office*.

James B. Bull, Esq., *Clerk of the Journals*.

H. B. Mayne, Esq., *Private Bill Office*.

Senior Clerks :—

S. B. Gunnell, M. C. Conry, C. E. A. Leigh,

F. H. Webber, W. A. F. Davie, W. M.

Molyneux, Esqrs.; G. Laughton, Esq.,

Supernumerary.

Examiners of Petitions for Private Bills—J. H.

Robinson, C. W. Campion, Esqrs.

Clerk to Examiners and Taxing Master—F. St.

G. Tupper, Esq.

Librarian—G. Howard, Esq.

Accountant—W. O. Mayne.

Shorthand Writer—W. H. G. Salter.

Secretary to Speaker—E. Ponsonby, Esq.

Serjeant-at-Arms—H. D. Erskine, Esq.

Deputy Serjeant—F. R. Gosset, Esq.

Assistant Serjeant—Hon. E. H. Legge.

Chaplain—Hon. and Rev. F. Byng, M.A.

Speaker's Counsel—Hon. E. Chandos Leigh,

Q.C.

Referees of Private Bills—Sir J. T. B. Duck-

worth, Bart., Alfred Bonham Carter, Esq.

House of Deputies, The Austro-Hungarian.

See AUSTRO-HUNGARY.

House of Lords. The peers of England may be divided into two classes, *lords spiritual and temporal*. The first consists of the Archbishops of Canterbury and York, and twenty-four bishops of the Church of England, the number not having been increased with the successive creation of new bishoprics. The Archbishops and the Bishops of London, Durham, and Winchester are always entitled to sit; the other bishops only receive a writ of summons when the avoidance of a see decreases the total number of lords spiritual to less than twenty-six, and then in order of seniority of appointment. The *temporal lords* may be divided into peers of the United Kingdom whose titles are hereditary, representative peers of Scotland and Ireland, and lords of appeal in ordinary.

By the Act of Union between England and Scotland the *Scottish peers* send sixteen representatives to the House of Lords, who are elected immediately after every general election, and sit until parliament is dissolved. The *Irish peers* elect twenty-eight representatives for life. The *Lords of Appeal*, in the majority of the few appointments already made, are life peers. The peers temporal are divided into dukes, marquises, earls, viscounts, and barons, these titles taking precedence in the order given. But it must be borne in mind that a peer may hold a superior Scotch or Irish title (and by which he may be generally known) to that under which he sits as a peer of the United Kingdom. Thus the Duke of Argyll sits as Baron Sundridge and Hamilton, and the Duke of Buccleuch as Earl of Doncaster. The lords spiritual and temporal sit together, and all have an equal voice and vote in the house, whatever may be their rank. As in the House of Commons, each peer must be present to record his vote, the practice of peers giving *proxies* having been discontinued. A newly created peer, or one who has been elevated to a higher title, is introduced by two other peers of his own degree, who are accompanied by the *Earl Marshal* (the hereditary officer of the Duke of Norfolk), the *Lord Great Chamberlain* (Lord Aveland is at present Deputy Lord Great Chamberlain), all in their parliamentary robes, attended by *Garter King of Arms* (Sir Albert Wood has long held this office), and *Black Rod* (Sir J. Drummond). The procession enters the house at the bar, and bows three times on the way to the woolsack, where the peer kneeling presents his patent and writ to the Lord Chancellor. Both these documents are read by the clerk, and the oath is administered to the peer at the table, and he subscribes the roll. He is then with further formalities conducted to one of the benches of the house, the position chosen varying with the rank of the new peer, where he and his introducers bow thrice to the Lord Chancellor, by whom he is afterwards congratulated. Peers are robed on these occasions, and at the opening of parliament by Her Majesty, but wear their ordinary dress when the House is sitting for business. A bishop is introduced by two other bishops, but without many of the formalities described above; representative peers simply present their writs, and are sworn like peers succeeding to a title. (See also PARLIAMENTARY PROCEDURE.) The following is the present composition of the House of Lords :—

Peers of the Blood Royal	5
Archbishops	2
Dukes	22
Marquises	20
Earls	118
Viscounts	27
Bishops	24
Barons	282
Scotch Representative Peers	16
Irish Representative Peers	28

Thirteen of the foregoing are minors (Baron Athlumney attains his majority March 23rd, 1886), and one peer is an English as well as an Irish peer. There are in addition seven ladies who are peeresses of the United Kingdom in their own right. The names of the peers, with some particulars, will be found distributed throughout this work.

House of Lords, Abolition of. Alphabetical List of Members of the House of Commons in favour of the Abolition of the Hereditary House. See APPENDIX.

House of Peers, Principal Officers of.

Chairman of Committees—Earl of Redesdale.
Clerk of the Parliaments—Henry John L. Graham, Esq.

Deputy Clerk of Parliaments—Ralph Disraeli, Esq.

Reading Clerk and Clerk of Outdoor Committees—Hon. S. Bethell.

Counsel to Chairman of Committees—Joseph H. Warner, Esq.

Chief Clerk—E. M. Parratt, Esq.

Senior Clerks :—

B. S. R. Adam, Esq., *Principal Clerk, Private Bill Office, and Taxing Officer.*

W. H. Haines, Esq., *Principal Clerk of Private Committees.*

O. E. Grant, Esq., *Peers' Printed Paper Office.*

A. W. Dubourg, Esq., *Principal Clerk, Judicial Department.*

Clerk of the Journals—G. J. Webb, Esq.

Clerk attending the Table—A. Harrison, Esq.

Principal Clerk for Bills—H. C. Malkin, Esq.

Receiver of Fees and Accountant—W. A. Malony, Esq.

Librarian—J. H. Pulman, Esq.

Examiners for Standing Orders—J. H. Robinson and C. W. Campion, Esqrs.

Gentleman Usher of the Black Rod—Admiral Hon. Sir J. R. Drummond, G.C.B.

Yeoman-Usher—Col. Sir R. C. Spencer Clifford, Bart.

Serjeant-at-Arms—Lieut.-Col. Hon. W. P. M. C. Talbot.

Deputy Serjeant—S. Hand, Esq.

Shorthand Writer—W. H. Gurney Salter, Esq.

Resident Superintendent—Mr. Scott.

Houses of Convocation.

** In the Lower Houses those marked * are Proctors for the Chapter; those marked † Proctors for the Clergy.

PROVINCE OF CANTERBURY.—THE UPPER HOUSE.

Archbishop of Canterbury, *President*.—Bishops of London, Winchester, Bangor, Bath and Wells, Chichester, Ely, Exeter, Gloucester and Bristol, Hereford, Lichfield, Lincoln, Llandaff, Norwich, Oxford, Peterborough, Rochester, St. Albans, St. Asaph, St. Davids, Salisbury, Southwell, Truro, and Worcester.

THE LOWER HOUSE.

Prolocutor: Ven. George H. Sumner, M.A., Archdeacon of Winchester.

Canterbury—Dean R. P. Smith; Archdeacons Parry (Bishop Suffragan of Dover) and Harrison; *Rev. Canon Rawlinson, †Rev. Canons Puckle and Jeffreys.

London—Deans Church and Bradley; Archdeacons Gifford, Hessey, and Farrar; *Revs. Canons Gregory and Prothero, †Rev. A. Brook and Canon W. Cadman.

Winchester—Dean Kitchen; Archdeacons Sumner, Atkinson, and Bishop McDougall; *Rev. Canon Warburton, †Rev. Canons Wilson and Sapte.

Bangor—Dean Lewis; Archdeacons Jones and Evans; *Rev. Chancellor Briscoe, †Revs. P. C. Ellis and D. W. Thomas.

Bath and Wells—Dean Plimptre; Arch-

deacons Denison, Browne, and Fitzgerald; *Rev. Canon Bernard, †Rev. Prebendaries Ainslie and Salmon.

Chichester—Dean Burgon; Archdeacons Walker and Hannah; *Rev. Canon Crosse, †Rev. Canons Campion and Stephens.

Ely—Dean Merivale; Archdeacons Emery, Chapman, Bathurst, and Vesey; *Rev. Canon Lowe, †Rev. Canons Hopkins and Macaulay.

Exeter—Dean Cowie; Archdeacons Sanders, Earle, and Woollcombe; *Rev. Prebendary Kempe; †Rev. Prebendary Sadler and G. R. Prynn.

Gloucester and Bristol—Deans Butler and Elliot; Archdeacons Norris, Hayward, and Sherringham; *Rev. Canons Harvey and Wade, †Rev. Canons Medd and Mather.

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Lichfield—Dean Bickersteth; Archdeacons Allen, Iles, and Sir L. T. Stamer; *Rev. Canon J. G. Lonsdale, †Revs. J. T. Jeffcock and E. Lane.

Lincoln—Dean Butler; Archdeacons Kaye and Trollope; *Rev. Sub-Dean Clements, †Revs. G. G. Perry and A. S. Wylde.

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Norwich—Dean Goulburn; Archdeacons Perowne, Nevill, and Groome; *Rev. Canon J. M. Nisbet, †Revs. Canon C. Frere and Hinds Howell.

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Peterborough—Dean Perowne; Provost Hornby; Archdeacons Pownell, Thicknesse, and Lightfoot; *Rev. Canon Argles, †Revs. Canons Yard and H. Twells.

Rochester—Dean Scott; Archdeacons Cheetham, Richardson, and Burney; *Rev. Canon H. W. Burrows, †Revs. Erskine Clarke and Canon A. Legge.

Salisbury—Dean Boyle; Archdeacons Lear, Sanctuary, and Buchanan; *Rev. Canon Swayne, Rev. Prebendary Dayman and Sir J. E. Philipps, Bart., †Rev. Canons Dayman and Hutchings.

St. Albans—Bishop Blomfield; Archdeacons Laurence and Johnson; *Rev. Canon Neville, †Revs. E. T. Vaughan and T. Scott.

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Housing of the Industrial Classes.

The distressing revelations made by public-spirited individuals, and a Royal Commission, as to the unhealthy and terribly demoralising conditions under which large masses of the industrious poor are forced to live in London and other large towns, have given rise to a wide-spread determination to enforce sanitary legislation ; to largely increase the dwelling accommodation for the poor ; and to modify the existing laws and regulations relating to land tenure and house property in populous centres. Two or three facts, however, will be sufficient to indicate the difficulties which surround the question. One-half the children attending the London Board Schools belong to families living in one room. Clearances are continually being made for railway accommodation or street improvements, without any adequate provision for housing the evicted families. The increase of population in London is about 50,000 per annum ; and all the efforts made by companies and societies to provide increased accommodation during the last twenty years would scarcely be sufficient for one year's increase in the number of dwellings required. Moreover, the price of land in the metropolis varies from £4 10s. per yard in the central portions, to £1 10s. in the suburbs. Much has been done to afford comfortable habitations for the working classes outside the metropolis, and workmen's trains are enforced by statute. But this mode of living involves the sacrifice to a large extent of domestic comfort and family life, as well as extra expense for meals away from home. Nevertheless, land in many rural localities is now to be had, both for building and agricultural purposes, at from £15 to £50 per acre. Hence the question has been asked,

Cannot workmen be enabled to live decently near their work, by having their work brought near to them, in village settlements, where they could work and live in healthy surroundings and in comfortable dwellings ? These considerations have led to a movement described in another article. (See INDUSTRIAL VILLAGES.)

Housing of the Working Classes Act, 1885. This Act, based upon the recommendations of the Royal Commission appointed in 1884, amends three distinct groups of statutes : namely, the Labouring Classes' Lodging Houses Acts, 1851 to 1867 ; the Artisans' Dwellings Acts, 1868 to 1882 ; and the Artisans' and Labourers' Dwellings Improvement Acts, 1875 to 1882. Its effect can best be understood by a separate reference to each of the above groups. (a) Labouring Classes' Lodging Houses Acts, passed with a view to encourage the erection by local bodies of proper lodging houses for the working classes, and rendered almost useless by defects in their mechanism. The Act of 1885 empowers the Commissioners of Sewers in the City of London, the Metropolitan Board of Works in other parts of the Metropolis, and elsewhere the several urban and rural sanitary authorities, to adopt these Acts. A rural sanitary authority must, however, apply to the Local Government Board for a certificate giving authority to adopt the Acts ; and before granting this the Local Government Board is to hold an inquiry by one of its inspectors. The term "lodging houses" is to include separate houses or cottages, whether containing one or several tenements. (b) Artisans' Dwellings Acts. The Act of 1885 provides that the owner of any premises who is required under the Act of 1868 to execute any works upon or to demolish such premises shall no longer be able to require the local authority to purchase them. (c) Artisans' and Labourers' Dwellings Improvement Acts. The Act of 1885 extends these to all urban sanitary districts, their previous application being only to districts of at least 25,000 inhabitants. In cases in which an arbitrator has determined the amount of compensation due to an owner under these Acts, no appeal shall lie from his decision to a jury unless allowed by the High Court of Justice. In addition the Act of 1885 amends the general sanitary law by giving every sanitary authority power to make byelaws for the regulation of lodging-houses, and of tents, vans, sheds, etc., used as human habitations. Persons authorised by a Justice of the peace or by a sanitary authority may examine such tents, vans, sheds, etc., to ascertain whether there has been any infringement of these byelaws, or whether they contain any one suffering from a dangerous infectious disorder. The Settled Land Act of 1882 is so amended as to enable land to be sold or leased in pursuance of that Act for the erection of dwellings for the working classes, although if sold or leased for other purposes a better price might have been obtained ; and to bring within the definition of improvements on which capital may be expended under that Act, any dwellings for the working classes not actually injurious to the settled estate. Corporate bodies receive similar powers of selling or leasing their land for the erection of dwellings for the working classes. All contracts made after the passing of the Act for letting habitations to persons of the working classes are to imply a condition that such habitations are reasonably fit for their

purpose. The remaining provisions of the Act can only be understood by a reference to the text. It applies with modifications to Scotland and Ireland.

Hovas. See MADAGASCAR.

Howard, Mr. Edward Stafford, M.P., was b. 1851. Educated at Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1875). J.P. and Deputy Lieutenant for Gloucestershire. Returned in the Liberal interest as member for East Cumberland (1876-85); South Gloucestershire (1885).

Howard of Glossop, Francis Edward Fitzalan Howard, 2nd Baron (creat. 1869); b. 1859; succeeded his father 1883.

Howard, Mr. Henry Charles, M.P., of Greystone, was b. 1850. Educated at Harrow and Trin. Coll., Cambridge. Deputy Lieutenant and J.P. for Cumberland and Westmoreland. Returned in the Liberal interest as member for Mid Cumberland (1885).

Howard, Mr. John Morgan, Q.C., M.P., was b. 1836. Called to the bar at the Middle Temple (1858); Q.C. (1874). Appointed Recorder of Guildford (1875). Elected a Bench of his Inn (1877). J.P. for Middlesex and Westminster. Returned in the Conservative interest as member for Dulwich (1885).

Howard Mr. Joseph, M.P., second son of the late Mr. John E. Howard, F.R.S., of Tottenham. Educated at London Univ. Called to the bar (1856). Is J.P. for Middlesex. Returned in the Conservative interest as member for Tottenham Division (1885).

Howard De-Walden and Seaford, Frederick George Ellis, 7th Baron (creat. 1597); b. 1830; succeeded his father 1868. The 1st Baron Howard De-Walden was mainly instrumental in discovering the Gunpowder Plot.

Howe, William Richard Penn Curzon-Howe, 3rd Earl (creat. 1821); b. 1822; succeeded his brother 1876. Military sec. to Commander-in-chief in India (1854). Has the Kaffir war medal. The first peer was the celebrated Admiral.

Howell, Mr. George, M.P., was b. 1833, at Wrington, in Somersetshire. For some time secretary of the London Trades Council, subsequently being secretary to the Parliamentary Committee of the Trades Union Congress. Returned in the Liberal interest as member for North-East Bethnal Green (1885).

Howson, The Very Rev. John Saul, late Dean of Chester, d. Dec. 15th, 1885. He was b. in 1816, and educated at Trin. Coll., Cambridge, where he graduated B.A. in double first-class honours in 1837. He took orders in 1845, and became senior classical master, and in 1849 Principal, of the Liverpool College. He was appointed Vicar of Wisbech in 1866; acted as exexamining chaplain to the Bishop of Ely (1867-73), and was appointed to the Deanery of Chester (1867).

Howth, William Ulrick Tristram St. Lawrence, 4th Earl (creat. 1767); b. 1827. Was State Steward to the Lord Lieutenant of Ireland (Feb. 1855 to March 1858, and June 1859 to 1866); M.P. for Galway (Dec. 1868 to Feb. 1874).

Hoyle, Mr. Isaac, M.P., The How, Prestwich, was b. 1828. Educated at Crosby Hall, Frodsham, Cheshire. J.P. for Manchester, and a director of the Manchester Chamber of Commerce. Returned in the Liberal interest

as member for Heywood Division, South-East Lancashire (1885).

Hubbard, Rt. Hon. John Gellibrand, M.P., P.C., was b. 1805. He is a member of the Court of Lieutenancy for London, and a Deputy Lieutenant for Buckingham. Has for 46 years been a Director of the Bank of England. Is the author of several important works on finance. Returned in the Conservative interest as member for City of London (1880-85); re-elected 1885.

Hudson, Sir James, G.C.B., d. Sept. 20th, 1885. He was b. in 1810. He filled various positions at Court until the death of William IV., to whom he acted as assistant private secretary during the whole of his reign. He was afterwards Secretary of Legation successively at Washington (1838), the Hague (1843), and Rio de Janeiro (1845), at which capital he became Envoy in 1850. He was minister at Turin during the time when the Italians were in the midst of the struggle for unity. He was made a K.C.B. on the arrival of the Sardinian troops in the Crimea in 1855, and on his retirement with a pension (1863) he was made a G.C.B.

Hughes' Carbon Transmitter. See MICROPHONE.

Hughes' Induction Current Balance. See TELEPHONE.

Hughes, Mr. Edwin, M.P., was b. 1832. Educated at King Edward VI.'s Grammar School, Birmingham. Admitted a solicitor (1860). Is a member of the London School Board and of the Metropolitan Board of Works, and is also lieutenant-colonel of the 2nd Kent (Plumstead) Artillery Volunteers. Mr. Hughes was for many years Conservative election agent for the City of London and the borough of Greenwich. Returned in the Conservative interest as member for Woolwich (1885).

Hughes-Hallett, Lieut.-Colonel Francis Charles, M.P., was b. 1838. Educated at Brighton College, and the Royal Military Academy, Woolwich. Entered the Royal Artillery (1859), saw considerable service in Gibraltar and Ireland, and was appointed to the Royal Horse Artillery. Colonel Hughes-Hallett was ordered out to Scinde and Beluchistan (1868), whence he returned invalided (1870). Married Lady Selwyn, widow of the late Lord Justice Selwyn (1871). Commanded the 2nd Brigade North Irish Division Royal Artillery (1875). Exchanged into the 2nd Brigade Southern Division Royal Artillery, a command he holds at the present time (1886). Returned in the Conservative interest as member for Rochester (1885).

Hughes' Type Writer. See POSTAL TELEGRAPH DEPARTMENT.

Hugo, Victor Marie. French poet, novelist, and philanthropist, b. Feb. 26th, 1802, at Besançon. He received his education at Paris, and at the age of twenty issued his first volume of "Poems and Ballads." His next work, written for the stage, was a drama on Cromwell. The preface to "Cromwell" was a declaration of war on the old stiff, classical school, in which Hugo repudiated the dramatic unities of place and time. This preface provoked a storm of hostile criticism, and a little later the young poet put his theories into practice and produced "Marion de Lorme," which was vetoed by the censorship then under the government of Charles X. The production of "Hernani," which followed, excited a furious controversy between the classics and the romancists. After the Revolution of 1830, "Marion de Lorme" was

produced at the Porte St. Martin theatre, being shortly after followed by "Le Roi s'amuse," which the Government prohibited. "Lucretia Borgia," "Marie Tudor," "La Esmeralda," "Les Burgraves," and other dramas, were produced in quick succession. In 1841 Hugo was elected a member of the Academy. Not only had he written a number of dramas, but had produced among other great romances, "*Notre Dame de Paris*," thus placing him in the foremost rank of French novelists. In 1845, under the Government of Louis Philippe, he was created a peer of France. Victor Hugo presided, in 1849, at the Peace Congress at Paris, Mr. Cobden being vice-president. After the *coup d'état* (1851), he fled to Brussels, and there produced "*Napoleon le Petit*," the result being his expulsion from Belgium. He then took his abode in Jersey, and while residing there published "*Les Châtiments*," in which the new Emperor, and his satellites were unsparingly satirised. The English Government ordered him to quit the island, and he removed to Guernsey, where he spent several prolific years of work, "*Les Misérables*" being the greatest production of this period. At the fall of the empire he returned to Paris. Hugo opposed the violence of the Commune. In 1871 he was elected to the Assembly of Bordeaux, but resigned when it would not listen to Garibaldi. He published in 1874 his great prose epic, "*Quatre-vingt-treize*." On Jan. 30th, 1876, he became a member of the Senate. He died at his residence in Paris, 22nd May, 1885, and his remains, after lying in state under the Arc de Triomphe, were interred in the Panthéon at the national expense.

Humbert IV., King of Italy; b. 1844; is the eldest son of King Victor Emmanuel, whom he succeeded on the throne (January 1878). Prince Humbert, along with his father, took an active part in the war of independence, and displayed no less energy in his efforts to unite Italy. He co-operated in the reorganisation of the kingdom of the two Sicilies, and both in Naples and Palermo he enjoys a well-deserved popularity. He has been invested with the Order of the Garter, and received the investiture at the hands of the Duke of Abercorn. In 1868 his Majesty married the Princess Marguerite Marie Thérèse Jeanne of Savoy, his cousin, and the daughter of the late Duke Ferdinand of Genoa, brother of King Victor Emmanuel. His eldest son, who bears the title of Prince of Naples, was born in 1869.

Hungary. See AUSTRO-HUNGARY.

Hunt, Mr. Frederick Seager, M.P. Educated at Westminster School. Returned in the Conservative interest as member for West Marylebone (1885).

Hunter, Sir W. Guyer, M.P., K.C.M.G., was educated for the medical profession at Charing Cross Hospital, the Westminster Ophthalmic Hospital, the Hospital for Children (Waterloo Rd.), and the County Ophthalmic Hospital, Maidstone. Entered the Indian Medical Service, Bombay Presidency (1850). Appointed Principal of the Grant Medical Coll. (1876), and Vice-Chancellor of the University, Bombay (1879). Returned in the Conservative interest as member for Central Hackney (1885).

Hunter, Mr. William A., M.P., was b. 1844. Educated at the Gram. Sch. and Univ. of Aberdeen. He graduated (1864), taking the highest honours in Philosophy and Natural Science. Called to the English bar (1867). Formerly

Professor of Roman Law and Professor of Jurisprudence, Univ. Coll., London. Returned in the Liberal interest as member for North Aberdeen (1885).

Huntingdon, Warner Francis John Plantagenet Hastings, 14th Earl of (creat. 1529); b. 1868; succeeded his father 1885.

Huntly, Charles Gordon, P.C., 11th Marquis of (creat. 1521); was b. 1847. 1st premier Marquis of Scotland. Sits as Baron Meldrum.

Hurricanes. See METEOROLOGY.

Hurcarla. See ARMY.

Hutchinson, Vinct. See DONOUGHMORE, EARL OF.

Hutton, Mr. James F. M.P., F.R.G.S., was b. 1826. Is a J.P. for Lancashire, Belgian Consul at Manchester, and President of the Manchester Chamber of Commerce. Returned in the Conservative interest as member for North Manchester (1885).

Huxley, Mr. Thomas Henry, the foremost of living English biologists, b. May 4th, 1825, at Ealing. Studied medicine, and was at first, after becoming qualified, a ship's surgeon. In 1852 was elected a Fellow of the Royal Society; 1855, Professor of Natural History at the Royal School of Mines, and also Fullerian Professor of Physiology at the Royal Institution; 1858, Croonian Lecturer at the Royal Society; 1862, President of the Biological Section of the British Association; 1870, President of the Association itself for the year, and member of the London School Board; 1872, Lord Rector of Aberdeen University; 1873, Secretary of the Royal Society; 1878, LL.D. Dublin and Edinburgh; 1879, LL.D. Cambridge; 1883, Rede Lecturer at Cambridge, and President of the Royal Society. In October 1884 he left England on account of ill-health. He recently (1885) resigned his official duties, which included the Inspectorship of Fisheries, and the presidency of the Royal Society. His works, not noting papers to scientific and general periodicals, are: 1853, Translation, with Busk, of Kölliker's "Histology"; 1858, "Educational Value of Natural History Sciences"; 1857, Translation of "Von Siebold on Tape-worms"; 1859, "Oceanic Hydrozoa"; 1863, "Evidence as to Man's Place in Nature, and Knowledge of the Causes of the Phenomena of Organic Nature"; 1864, "Elements of Comparative Anatomy and Classification of Animals"; 1866, Elementary Physiology; 1869, Introduction to the Classification of Animals"; 1870, "Lay Sermons"; 1871, "Manual of Anatomy of Vertebrate Animals"; 1873, "Critiques and Addresses"; 1875, "Elementary Biology," with Martin; 1877, "Physiography," "American Addresses," and "Anatomy of Invertebrata"; 1880, "Crayfish"; 1881, "Science and Culture," and other Essays. Professor Huxley is as well known and as notable a teacher and lecturer as he is a distinguished experimenter and writer.

Hwangti. See CHINA.

"Hyacinthe, Père." See NOMS DE PLUME, and OLD CATHOLICS.

Hybrids. See ORIGIN OF SPECIES.

Hydrophobia. So called from the fear of water, which is a prominent symptom in the acute stage of the disease. It never occurs spontaneously, and nearly always arises from the bite of a rabid animal of the canine or feline tribes—dogs being the most common source, on account of their fellowship with man; but it occasionally ensues from the bite of a cat, fox or wolf. Never communicated from

man to man (Shinkwin). It may be acquired from inoculation of an abrasion during the dissection of a rabid animal. Of those bitten only about half the number manifest the disease, even when no preventive measures are adopted—probably due to the bites having been inflicted through the clothes—but when they are adopted at the time the proportion is much less. Canine madness broke out in North Greenland amongst the Eskimo dogs in 1859, spreading by inoculation through bites, and causing much havoc amongst the dogs for several years; but was not communicated as hydrophobia to man, although the skins were used and the carcasses of the infected animals eaten by the natives (Dr. Colan, R.N.). The period of incubation in man is longer and more variable than in any other disease, being sometimes only twelve days, and sometimes two and a-half years: longer time is even recorded, but the cases are doubtful: the average period is about two months. In dogs the time for rabies is less variable, and is usually from six weeks to three months, but it may be six months. Suspected dogs should be strictly quarantined for at least six months, or, which is better, killed at once. Dr. W. R. Gowers has devoted much study to the pathology of this disease, and found that the most important changes (similar in dogs) occur in the floor of the fourth ventricle of the brain and the contiguous part of the medulla—that is, in the neighbourhood of the centres of respiration and deglutition; the muscles which govern these acts are therefore readily thrown into a state of spasm by the sight or even sound of water. During an attack the saliva becomes very viscid, and hangs about the patient's mouth, so that his efforts to expel this have given rise to the erroneous impression of his "barking like a dog." Delirium and convulsions increase in violence for three or four days, when exhaustion usually terminates his sufferings by death; more rarely, asphyxia, from spasm of the glottis. Attacks sometimes last eight or ten days; the less rapidly the symptoms are evolved the greater is the hope that recovery may take place (which, however, is a rare exception). The treatment of a bite received from a suspected or doubtful animal should be directed to prevention of absorption of the virus—by tying a ligature tightly above the part and removing the virus as quickly as possible from the wound—best done by forcibly sucking it and washing the mouth frequently with dilute carbolic acid, or vinegar and water; the wound should then be cauterised with *finely pointed* nitrate of silver pushed deeply into the tooth marks and twisted round several times. Youatt, who was frequently bitten by rabid dogs, greatly trusted to this. Strong carbolic or nitric acids or caustic potash are still more efficacious applications. Actual cautery by means of a red-hot wire or nail should be used where these are not obtainable; burn too much rather than too little, and repeat the cautery a second or third time, as the iron is soon cooled by the blood. It is wiser not to destroy the animal from which the bite was received, as many doubtful cases of rabies occur; and if it survive for seven days, the patient's mind can be calmed by the assurance that the dog was not mad. Spurious hydrophobia is not uncommon, and is excited in nervous persons by mental apprehension. When the real disease is developed there is no known specific remedy. Cases of cure are recorded by the use of the mercurial vapour bath, curara by injection

tion of $\frac{1}{16}$ to $\frac{1}{4}$ of a grain (Niemeyer), morphia and Calabar bean (Nicholls); cold affusion to head and spine was successful in two cases in India, and inhalation of oxygen in conjunction with administration of the monobromate of camphor in Russia. Hot air and vapour baths, and inhalation of chloroform, moderate spasm and afford relief. Chloral by enema and morphia hypodermically are recommended by Dr. W. R. Gowers. Professor Pasteur has for some time past been carrying on a series of experiments upon dogs with the object of rendering them insusceptible to rabies. He adopted the practice of inoculation similar in principle to that previously found successful in splenic fever and chicken cholera—thus succeeding in rendering some sixteen out of every twenty proof against the disease; this proof was furnished by their remaining healthy after being bitten by another rabid dog. In order to obtain virus of different degrees of strength he inoculated a rabbit with a portion of the spinal cord of a dog, which caused death in fifteen days; and by inoculating each successive rabbit in a series of sixty with the same material taken from the spine of its newly-dead predecessor, he obtained a virus so increased in potency that the period of incubation was reduced to seven days. He discovered that the oldest and most desiccated virus had the least strength, whilst that which was freshest had the greatest, and therefore produced the shortest period of incubation. By this mode of attenuation and consequent reduction of force, he considers it possible to administer a small dose, which shall not only be harmless but protective against a second; and thus by a series of some fourteen inoculations, each increasing in potency, the animal is rendered insusceptible to the most powerful virus, and absolutely proof against the disease. He concluded that similar results would be obtained in the human subject,—consequently, when an Alsatian boy named Meister, who had been bitten by a rabid dog in July 1885, was seen by him sixty hours after the infliction of the bite, after consultation with Dr. Vulpian and others, he proceeded to inject portions of the spinal cord of a rabbit which had died of rabies, repeating the operation with virus of constantly increasing strength thirteen times in ten days. This boy showed no symptoms of hydrophobia four months after; rabbits, on the contrary, which were at once inoculated with the strongest virus, last used for the boy, died with the usual symptoms. It by no means follows that every person bitten by a rabid animal would suffer from hydrophobia; and the period of incubation is generally longer delayed in the human than in the animal subject, so that time and repeated successes can alone entitle us to assume the efficacy of this procedure. Testimony afforded by so eminent a scientist as M. Pasteur deserves the most careful investigation. Under any circumstances, the greatest care would have to be instituted that too strong a virus was not used in the first inoculation, or the result might be the very opposite to that intended, and in less skilled hands prove a great danger. Inoculations from one species of animal to another, even though belonging to the same genus, often have totally different results. (See INOCULATION.) Prof. Pasteur says that it will now be necessary to have establishments where rabbits might always be kept inoculated with rabies; this would be fraught with difficulty, and it would be far easier to "stamp out" rabies. In Berlin,

1853, the disease had assumed alarming proportions, but by the destruction of all stray dogs, and the compulsory use of an effectual wire muzzle, only two cases of rabies were reported at the Berlin Veterinary College in the subsequent six years. Prof. Pasteur has not succeeded in finding any germs (microbes) in the blood of animals suffering from rabies. It seems evident that these germs produce little if any effect at the point of inoculation by a bite, because the wound heals in the usual manner; they do not multiply in the blood, but only when they come into contact with certain tissues, as the brain and spinal cord. If the period of incubation varies so much, it may be inferred that the germ has failed to reach that part of the body necessary for its development and multiplication, and in the meantime been arrested in some other unfavourable to these processes, but sufficiently capable of preserving its vitality for the time being. Since the publication of this case, nearly five hundred persons are reported to have been under M. Pasteur's treatment to undergo the process of inoculation, some travelling from England, America, and other distant parts.

Hydrophobia, Law of. The local authority may, if a mad dog, or dog suspected of being mad, is found within its jurisdiction, make an order placing such restrictions as it thinks proper upon all dogs not being under the control of any person. This order may be for such a time as it thinks proper, and may extend through the whole of its jurisdiction or any part of it. The local authority is to publish due notice of the order. Any person disobeying it makes himself liable to a fine of 20s., recoverable on summary conviction. The local authority referred to is either the town council, the local board, the improvement commissioners, or in places where none of these is to be found, the justices in petty sessions.

Hydrozoa. See ZOOLOGY.

Hygiene is the art of preserving health, the necessity of which to the nation at large, as well as to the individual, has been recognised from a very early period. Pythagoras, Herodotus, Hippocrates, Celsus, Galen, Plutarch, and others laid down rules of hygiene. Galen was the first to point out that different rules must be followed for infancy, youth, manhood, and old age. With the advance of physiology hygiene has acquired a more scientific basis. The necessity for observation of its laws begins on the part of the parents with conception itself, and ends not on the part of the community even with death—not, indeed, until the body shall have been reduced to its natural elements. Mind and body come equally within its sphere, and both must be nourished, trained, and kept within healthy surroundings, or either may disarrange the other. Each life-epoch demands distinct rules with regard to light, air, ventilation, warmth, clothing, water, food (variety, quantity, quality, and cooking), cleanliness, sleep, sexual relations, and mental and bodily culture and control, so that the whole economy may be surrounded by conditions most fitted to insure perfect health. Individual effort may do much to secure personal health, but the aggregation of numbers of men renders it impossible for the unit of a community to control the conditions of his surroundings. A distinct duty, therefore, devolves upon the

state to provide the most perfect sanitary laws for the protection of its subjects. The Mosaic law enjoined strict rules for the guidance of the Israelites. The Public Health Act was not passed in England until 1848, although certain statutes had previously been in force. The agitation of the subject was commenced by Dr. Southwood Smith (1832); but it is to the late Dr. Edmund Parkes that we are indebted for its systematic advocacy (Parkes "On Practical Hygiene"). Many Acts of Parliament have since been passed: such as Lodging Houses Act, 1851-3; Smoke Nuisance Abatement Act, 1853; Diseases Prevention Act, 1855; New Sanitary Act, 1866; Contagious Diseases Act, 1869 (abolished 1866); Adulteration of Food and Drugs Act, 1875; Public Health Acts, 1875-8 (water); Rivers Pollution Act, 1876; and the Contagious Diseases (Animals) Act, 1878. During the past year (1885) the **Royal Commission** which had been appointed in 1883 to inquire into "the Housing of the Poor" issued its first report. This did not, however, propose any very new or drastic measures, but urged that local authorities should be roused into more activity to put in force those powers which were already provided by former legislation; from this, however, resulted the passing of the Housing of the Working Classes Act (*q.v.*), introduced by the Marquis of Salisbury. The death-rate has sensibly diminished of late years, owing to increased knowledge of and the greater precautions taken against zymotic diseases. It is not too much to hope that a better understanding of the action of sunlight (see SOLARIUM), character of the water, and the nature of the soil and climate of different districts, combined with a knowledge of the geographical distribution of disease, may enable us to place those whose hereditary tendency is to develop a particular malady under the best conditions to prevent its inception.

Hygrometer. See METEOROLOGY.

Hyksos. See BIBLICAL ARCHÆOLOGY.

Hylton, Hedworth Hylton Jolliffe, and Baron (creat. 1866); b. 1829; succeeded his father 1876. Served through the Crimean war, and was in charge of the Light Cavalry at Balaklava; M.P. for Wells (1855-68).

Hypnotism (synon. Braidism) is produced in the manner described under BRAIDISM. During the hypnotic state portions of the brain only are involved in sleep, whilst others can be called into activity by the impression of a dominant idea communicated to it by the operator; and it is thus capable of receiving sensorial impressions which become arrested before conversion into conscious ideas, so that no recollection of what has happened during the sleep remains. The special senses retain their activity; the psychomotor centres can control complicated movements; muscular power may be heightened, whilst the muscular sense (analgesia) may be lowered. The countenance is at first expressionless, but on any action being performed animation returns. Illusions and hallucinations can be produced which are purely subjective and devoid of any external correlative. The phenomena of Hypnotism have recently received attention from Teulon, Charcot, Ch. Richet (Heidenhain), and others.

Hythe. See CINQUE PORTS.

Ibsen, Henrik. Norwegian dramatist and poet; b. March 20th, 1828, at Skien. The childhood of his "Peer Gynt" is said to be largely autobiographical. He was apprenticed when about sixteen to a chemist, but by dint of hard work and many privations was able at twenty-two to go to the Christiania University. He had by this time already written many poems; and in 1850 his first play, "Catilina," was produced at Christiania. In 1851 he started a weekly paper; and in the autumn of the same year he was appointed director of the National Theatre at Bergen by Ole Bull. In 1852 he travelled for a time in Denmark and Germany; and in 1857 he received the post of director of the Norske theatre at Christiania, which he managed till 1862. During this period several of his plays were written and produced. In 1863 he went abroad, returned to Norway for a few months, and since then has lived in Italy and Germany. Ibsen remained an exile till the summer of last year (1885), when he visited Norway, being everywhere received with the utmost enthusiasm. Like his countryman Björnson, Ibsen is an ardent politician, and has lately declared himself in sympathy with the Socialist movement. Most of Ibsen's works are translated into German, and some have been Englished. His best-known works are "Gildet paa Solhaug" (1856), "Fru Inger til Oesterad" (1857), the dramatic poems "Brand" (1866) and "Peer Gynt" (1867), "Kejsersog Galilæa" (1873), (Emperor and Galilean), English translation (1875), "De Unges Forbund" (1869), a volume of poems (1871), "Samsundets Statter" (1872), (Pillars of Society—produced in an English version at a Gaiety *matinée* in 1880), "Et Dukkehjem" (1880), "Nora" (translated into English 1882), "Gengangere," (1881), "Ghosts" (1884), "En Folkedjende" (1882), "Wildent" (1884).

"Iconoclast." See NOMS DE PLUME.

Iddesleigh, Stafford Henry Northcote, 1st Earl of, P.C. (creat. 1885), belongs to a Devon family which for many generations has held a high position in that county. He was born 1818, graduated with high honours at Oxford, and was called to the bar at the Inner Temple (1847). He became private secretary to Mr. Gladstone when President of the Board of Trade (1843). Sir S. Northcote subsequently held a position for some years in the Civil Service, before entering parliament as member for Dudley (1855-57), in the Conservative interest. He succeeded his grandfather in the baronetcy and estates in 1851. In the same year he was made a C.B. for services rendered to the International Exhibition. He also was afterwards joined with Sir C. Trevelyan in the inquiry into the Civil Service, resulting in throwing it open after some years to public competition. He sat for Stamford (1858-66), and for North Devon (1866-85), which he continued to represent until raised to the peerage as Earl of Iddesleigh on the accession to office of Lord Salisbury's ministry, which he entered as titular First Lord of the Treasury. Sir S. Northcote had previously held office as Financial Secretary to the Treasury (1859); President of the Board of Trade in Lord Derby's ministry (1866). Subsequently as Secretary for India,

(1867-8), and finally Chancellor of the Exchequer in Lord Beaconsfield's last ministry (1874-80). Sir Stafford published in 1862 a work entitled "Twenty Years of Financial Policy," which added much to his reputation as an authority in matters of finance. In 1871 he was appointed Joint Commissioner with Lord Ripon to effect a settlement of the vexed question of the "Alabama Claims," resulting in the Treaty of Washington. Lord Idlesleigh led the opposition in the Lower House during the Gladstone administration of 1880-85, in which position his personal character as a high-minded and genial gentleman and an honourable opponent won the esteem of both Queen and political foes, receiving a suitable recognition on the occasion of a public presentation of a testimonial from the past and present members of the House of Commons, irrespective of party (March 8th, 1886).

"Idstone." See NOMS DE PLUME.

Ignatieff, General Nicholas Paulovitch. Russian general and diplomatist, b. in 1832. His father, Count Paul Ignatieff, took a prominent part in facilitating the accession of the Emperor Nicholas to the throne. Paulovitch Ignatieff studied in the Corps des Pages, and became an officer in the Imperial Guard. When the Crimean war was declared, he belonged first to the staff of Count Berg at Revel, and afterwards at Finland. When the war concluded, he became military attaché in the Russian Embassy to the Court of St. James. In 1858, Ignatieff was made an aide-de-camp to the Emperor Alexander II. and obtained the rank of colonel. He was sent on a mission to Khiva and Bokhara, and afterwards despatched to Peking as a minister plenipotentiary. He obtained from the Chinese Government the cession of the Province of Ussuri. He came back to St. Petersburg, and was placed at the head of the Asiatic Department in the Ministry of Foreign Affairs. He filled the office of Representative of the Russian Court at Constantinople (1864-78). From 1878 to 1882 General Ignatieff was the Russian Minister of the interior. Governor-General of Irkutsk and Commander-in-chief of the troops of the Government, which post (1886) he now holds. He is also a Senator, a President of the Academy, and a Member of the Council of the Empire.

"Ignatius, Father." See NOMS DE PLUME.

Ilbert Bill. A measure proposed by the government of Lord Ripon in India, in order to extend the jurisdiction of native judges in criminal offences over Europeans. It took its name from Mr. C. P. Ilbert, the legal member of Council who had charge of the Bill. A proposal, apparently so insignificant, aroused a storm of political controversy without parallel in the recent history of India. On the one hand the natives claimed to be placed on an absolute equality with Europeans in the administration of justice; on the other hand, the Europeans protested that they would never submit to be tried by natives. At last, after many months' acrimonious discussion, a compromise was arranged which quietly passed into law. The jurisdiction at issue was given to native magistrates, subject to special guarantees

at their competence; while an exceptional right of appeal to a European magistrate was given of the same time to a European offender. The **Ilbert Bill** in this form was passed in 1884.

Ilchester, Henry Edward Fox-Strangways, P.C., 5th Earl of (creat. 1756); b. 1847; succeeded his uncle 1865.

Ilkworth, Mr. Alfred, M.P., was b. 1826. Educated at Huddersfield Coll. He is an extensive cotton spinner at Bradford. Deputy Lieutenant and J.P. for the West Riding. Returned in the Liberal interest as member for Knaresborough (1868-74); Bradford (1880-85); West Bradford (1885).

Illuminants. Of all illuminants in general gas still maintains its hold upon the public (see **ELECTRICITY**.) The history of **gas lighting** is briefly told, and the record includes similar opposition to that experienced by the railways and other revolutionary developments. After being tried with success in various industrial establishments and public institutions about the beginning of the present century, coal gas was brought into general use throughout London between 1814 and 1820. Acts of Parliament regulating the sale of gas were passed in 1860 and 1871; and there are two **Gas Referees** appointed by the Board of Trade—a chief gas examiner, and an auditor. During the electric light fever the gas shares of the Metropolis, an investment generally looked upon as sound and safe and of high value, fell considerably, but soon afterwards recovered ground. At the end of 1884 the **Gas Light and Coke Co.'s A stock** was quoted at 219 to 223, and at the end of 1885 it stood at 237 and 240; the **South Metropolitan A stock** in the twelvemonth rose from 260 and 265 to 287 and 292. It is satisfactory to add that these high premiums have been maintained concurrently with reduced charges to the public; thus the latter of the two companies named are now supplying gas at 2s. 6d. per 1000 cubic feet—and, in fact, the past few years have been marked by considerable concessions. One reason for this is to be found in the increased knowledge of the uses of **residual products**, such as ammonia and coal tar (see **WASTE SUBSTANCES**). Latterly the prices of these commodities have come down considerably, as though to point to the limit in the cheapness of gas manufacture; but the trade in them opens a wide field, and the application of **sulphate of ammonia** to the purposes of agriculture, for instance, is an interesting problem. As to recent developments in gas manufacture and gas lighting, their name is legion; and perhaps the exhibits at the **Inventions Exhibition** in London (1885) may be taken as a fair representation. Here the manufacture of **air gas**—air or other non-illuminant enriched by the vapour of hydrocarbons—was shown; there were also shown samples of both **wet** and **dry** meters for registering the quantity consumed, and new inventions in the indices, so that the householder or other consumer may be able readily to check the charges made upon him, and even an apparatus for testing the accuracy of the indices themselves. In supplying a dwelling or other building with gas some waste is looked upon as inevitable, and the consumer's rough-and-ready check upon it is to "turn off" the meter when the artificial light is not required. Several exhibitors produced samples of **regulators** or governors to regulate while in use the supply to the fittings. These are broadly described as of two classes—the "mercurial" and the "leather

diaphragma." One notable thing this apparatus brings about is the production of a **noiseless steady flame**. As to **burners**, the variety in this respect too is very great, these being the best known flat flame, the circular Argand, and the recuperative burners. **Messrs. Sugg**, at the Exhibition in question, as the results of years of experimental practice, showed the latest improvements; their "**Cromarty**" and "**Vincent**" recuperative samples being designed to give a maximum of light to a minimum of gas consumed, and embodying the theory of **Dr. F. Siemens**. The **Wenham Co.** also showed their recuperative burners for indoor illumination, as also did **Messrs. Kirkham & Co.** their "**Clark**" burner. All these illuminants are possessed of patented differences; but it is claimed that they are all alike in the one particular—that of assisting rather than retarding the ventilation of a room (which is a distinct step in advance), while yielding a soft and noiseless light. The difference between an ordinary flat flame burner and one made on the modern recuperative system, say such as Sugg's, has been calculated to be nearly fourfold in favour of the latter; thus, while the flat flame gives a light equal to two or three candles per cubic feet of gas, the recuperative will give as much as seven or eight-candle light per cubic foot. The "**Schülke**" burner, for out-door lighting and large apartments, exhibited by **Messrs. A. Wright & Co.** (Feb. 27th, 1886), is a new invention of **Herr Schülke**, who has successfully introduced it in France. It is on the regenerative principle, and a light of 200 candles is obtained with the consumption of 30 cubic feet of gas per hour. We have already referred to the residual products, but it may be added here that the **Albo-Carbon Co.** represent a system of utilising these to enhance the illuminating power of the gas, producing a fine light. Then there are also the means of **automatic lighting and extinguishing**, invaluable for public halls. Other descriptions of gas besides that obtained from coal have from time to time attracted attention. **Ruck's water gas** mixed with ordinary gas was successfully tried in 1873; "**Koh-i-noor**" gas, made from shale oil by the Messrs. Rogers at Watford, was said to be pure and cheap in production (1881-3). Some attention was caused by the investigations of **Messrs. West and Cooper** for economical production tried at Tunbridge Wells in 1884. **Mr. Bower** in 1884 brought out a lamp which was a combination of the **Grimston patents** (which took a gold medal at the Crystal Palace in 1882) on the regenerative principle, the products of the combustion being burnt; but this was not seen at the Inventions Exhibition. **Paraffin** oil is also a widely used illuminant. It is stated that the oil was first obtained from distillation of coal by **Reichenbach** (1830), and **Christison** about the same year; the name of **Mr. James Young**, however, is perhaps best known in this connection: he procured it from mineral oils; and paraffin lamps are in common use in many households, being generally considered a half-way agent between candles and gas. The word "paraffin" is derived from *parum affines*, having little affinity with anything, and the substance has been called **photogen**. **Petroleum** (*q.v.*), a mineral oil, has come into such use of late years that a large region in the **United States**, where it is found in abundance, is given up to its production, and is now known as **Petrolia** (Pennsylvania); numerous shafts are sunk, great refining works being

kept in constant operation. A **Petroleum Association** is in existence in the United Kingdom for the purpose of testing the imports; and in 1883 we imported 70,526,996 gallons of refined and unrefined oil. The oil is also found in **Upper Burmah**, where it has been worked for centuries in a rude fashion, and will now probably be rapidly developed. In **Europe** the greatest petroleum field lies near the Caspian Sea, the whole region between Tiflis and Baku, along the new line of railway, being described as soaked in oil: it is stated that no less than 200,000,000 gallons were produced here in 1882. **Candles**, of course, are old agents of artificial lighting, and it is not necessary to go into any details about them except to refer to the recent improvements. These are perhaps to be seen at their best at Messrs. Price's manufactory, Belmont, Lambeth. It is stated that palm and cocoanut oils are largely used here, the mineral oils from Burmah above referred to, etc. **Naphtha** may also be mentioned as another mineral oil in use for many common purposes, such as temporary street illumination.

Imperial Federation. The question of how best to consolidate or federate the British Empire had been studied by a few Englishmen for some years previously, but it was not until 1884 that a private committee consulted public men of both the great political parties, and upon their advice called together a conference of all who were known to accept the principle of Imperial Federation. This conference was held at the Westminster Palace Hotel on July 20th in that year, under the presidency of the Right Hon. W. E. Forster; and among his supporters were Sir H. Barkly, Sir F. Dillon Bell, Mr. Borthwick, M.P., Mr. Bryce, M.P., Viscount Bury, the Earl of Camperdown, Mr. Cowen, M.P., Mr. Cropper, Mr. E. Gibson (now Lord Ashbourne), Sir H. Holland, M.P., Mr. Dalton McCarthy (member of the Canadian House of Commons), Captain Charles Mills (Agent-General for the Cape Colony), the Marquis of Normanby, Sir Saul Samuel (Agent-General for New South Wales), the Earl of Rosebery, Mr. W. H. Smith, M.P., and Sir Charles Tupper (High Commissioner for the Dominion of Canada), while the Earl of Aberdeen, Sir A. Borthwick, M.P., Mr. Broadhurst, M.P., Sir Charles Gavan Duffy, the Earl of Dunraven, Sir A. Galt, Viscount Hampden, Sir M. Hicks-Beach, M.P., the Marquis of Lorne, Sir T. McIlwraith, Mr. Plunket, M.P., Sir H. Wolff, Lord Wolseley, and many others wrote approving the objects of the gathering. Resolutions were adopted affirming that some form of federation was essential; and at the adjourned conference, held in the following November, it was resolved to form the **Imperial Federation League**, whose object should be to secure by federation the permanent unity of the Empire; that no scheme of federation should interfere with the existing rights of local parliaments as regards local affairs; and that any scheme of Imperial Federation should combine on an equitable basis the resources of the Empire for the maintenance of common interests, and adequately provide for an organised defence of common rights. The League was duly constituted, Mr. Forster being appointed chairman of a strong executive committee, which office he still holds. The League has since that time made rapid progress, branches having been formed in a number of provincial towns, and also in several of the

colonies. The movement so far has been supported by men who differ greatly on other questions; it has been approved by a very large section of the English press, and the League has now an organ of its own published monthly, entitled "**Imperial Federation**." On the other hand, some politicians have questioned the feasibility of the League's objects, and have doubted whether it would be expedient even to attempt to give them effect. Mr. Bright unhesitatingly denounced the suggestion that the British Empire should form one country one undivided interest for the purposes of defence, as ludicrous, and the whole thing as childish and absurd. While the principle of Imperial Federation has been widely accepted, no specific and detailed scheme has yet been put forward by the League, though the utterances of some leading public men may indicate the direction the movement is taking. Lord Grey suggested the appointment of the agents of the colonies as privy councillors, and their constitution as a **Board of Advice** to assist the Cabinet, and especially the Colonial Secretary, in the management of colonial affairs; and the Marquis of Lorne supported and elaborated the proposition. Mr. W. E. Forster (February 1885) considered that probably our first step may be the formation of some such Board of Advice, which should, he thought, bear the same relation to the Secretary for the Colonies as the India Council does to the Secretary for India, with this most important difference, — that its members would be chosen by the Colonial Governments. This might eventually lead to either a **Federal Congress** or a **Federal Council**; though if the former it would probably be through the latter. What was wanted was an organisation for common defence, and an official acknowledgment of the right of the colonies to have a voice in the determination of foreign policy, especially when such policy directs their feelings or interests. Mr. Goschen (February 1885) said he could not tell where a home question ended and a colonial question began. He wished to see an interest taken in colonial subjects, and the question of the united empire, the question of our colonies, was to a great extent a working men's question; they must take it up, and hold their statesmen, and their public men, responsible for attention being paid to our Colonial Empire. Mr. Bryce, M.P., argued against any suggestion that the colonies should send representatives to the English House of Commons, though he thought that in a reformed Upper House room might with advantage be found for colonial members. The suggestion of a **representative Colonial Council** well deserved consideration. Such a council would perhaps be in the first instance merely consultative. Mr. J. Cowen, M.P., remarked that the United States, whose disruption had been so repeatedly and so exultantly predicted, had survived a century, and they supplied a felicitous example of federated expansion. Why could not England and her congeries of commonwealths federate also for their separate advantage and corresponding security? The action taken about this time by some of the colonies, when news reached them of the failure of the attempt to rescue General Gordon from Khartoum, has been considered to have an important bearing upon the leading principle of the League — that any scheme of Imperial Federation should combine the resources of the Empire, for the

maintenance of common interest, and provide for an organised defence of common rights. Offers of military assistance came spontaneously from New South Wales, Canada, Victoria, South Australia, and Queensland; but only that of the first-named colony was accepted, as it was thought the other contingents would not reach the Soudan in time to be of service. The New South Wales contingent served with great distinction in the Soudan. Her Majesty expressed her warm and cordial thanks for this proffered aid; Lord Derby, then Colonial Secretary, remarked that, apart from the question of military strength, the co-operation of the colonies in matters of this nature carried with it incalculable moral weight; and appreciative acknowledgments were also made by Mr. Gladstone, Earl Granville, and H.R.H. the Commander-in-Chief. Mr. Forster considered that the step taken by the colonies went far beyond a Colonial Board of Advice. Mr. Ashley, then Under-Secretary for the Colonies, ventured to affirm that that day Great Britain saw her forces, called from her various shores, marshalled side by side in the face of the enemy, Federation was an accomplished fact. All that would remain to be done was, if necessary, to clothe this new embodiment in some garb of formality. He proposed to admit the High Commissioner for Canada and the Agents-General of the other colonies to a seat in the House of Commons. Sir A. Blyth and Sir S. Samuel expressed the opinion that to allow representatives of the colonies to sit in the House and not to vote would not be a satisfactory arrangement. During last year (1885) important steps were taken in connection with **Australasian Federation** (q.v.). Consult "Imperial Federation," by the Marquis of Lorne (Sonnenschein).

Imperialists, French. See FRENCH POLITICAL PARTIES.

Imperialists, German. See GERMAN POLITICAL PARTIES.

Imperial Order of the Crown of India. This was instituted January 1st, 1878, and consists of the Sovereign and such as the Sovereign may think fit to appoint of the Princesses of Her Majesty's Royal and Imperial House; the wives and female relatives of Indian Princes; and the wives and other female relatives of any of the persons who have held, now hold, or will hereafter hold the office of Viceroy and Governor-General of India, Governors of Madras and Bombay, or Principal Secretary of State for India. The ladies of this order, as at present appointed, include the daughters and daughters-in-law of the Queen, numerous native Indian Princesses, and the wives or other female relatives of the above-mentioned officials—the latest additions being the Countess of Dufferin and Lady Randolph Churchill.

Ince, Mr. Henry Bret, Q.C., M.P., was b. 1830. Educated at London Univ. Called to the bar at the Inner Temple (1855); Benchers of Lincoln's Inn; created Q.C. (1875). Returned in the Liberal interest as member for Hastings (1883-85); East Islington (1885).

Inchiquin, Edward Donough O'Brien, 14th Baron (cr. 1536); b. 1839; succeeded 1872. Elected a representative peer for Ireland (April 1873).

Income Tax. See REVENUE, THE.

Incorporated Society of Authors, established in 1884 by Sir F. Pollock, Cardinal Manning, and other eminent literary men,

under the presidency of Lord Tennyson. Its object is to maintain authors' interests, to advise them as to questions of copyright, and in other ways offer them assistance, particularly to the inexperienced.

Independents, German. See GERMAN POLITICAL PARTIES.

India. A dependency of Great Britain, consisting partly of territory under the direct administration of British officials, and partly of native states, which are all subordinate, in varying degrees of relationship, to the suzerain power. The British territory was acquired by the East India Company, by conquest or treaty, in the course of one hundred years, dating from the battle of Plassey (1757). As a result of the mutiny of the Sepoy army (1857-58), the East India Company ceased to exist; and the sovereignty was vested by Act of Parliament in the Crown. The more powerful native chiefs continue to exercise every function of government within their own dominions, but their external dealings with one another are subject to the control of a British Resident. In other words, they have no international independence. In accordance with an Act of Parliament passed in 1876, Queen Victoria assumed the title of "Empress of India," *Kaisar-i-Hind*. The Parliament of the United Kingdom is, of course, supreme over India; but this supremacy is enforced rather by means of ministerial responsibility than by direct legislation. Practically, all the statutes relating to India are in the nature either of constitutional enactments or of financial provisions. The Act of Parliament that abolished the Company also created a Secretary of State for India, together with a Council (selected from among Indian officials for the most part), in whom is vested the authority of the Crown. In England, every measure concerning India runs in the name of the Secretary of State; and he alone is responsible to Parliament. In practice, he is always a cabinet minister of the first rank. In India, the supreme authority, both executive and legislative, is vested in the Governor-General in Council. The Governor-General, or Viceroy, who is usually a peer of political distinction, has power to overrule his Council in cases of emergency. For ordinary purposes, the council is composed of some six members, all appointed, like the Governor-General himself, by the Crown. One of these is the Commander-in-chief; another must have legal qualifications; another has charge of finance; another may be appointed with special reference to public works; the rest are usually experienced members of the civil service. For purposes of legislation, this Council is augmented by about twelve additional members, nominated by the Governor-General, of whom one-half must be non-official persons, and of whom some are always natives. The seat of the supreme government is Calcutta, with an annual migration to the hill station of Simla for the hot season. As regards the work of administration, India is divided into eight or more provinces. Two of these, Madras and Bombay, which boast an historic existence for two centuries, are styled Presidencies, and enjoy a certain precedence. They are each ruled by a Governor, appointed by the Crown, with councils modelled on that of the Governor-General. They each possess an army and a civil service of their own. Three of the other provinces (Lower Bengal, the North-Western Provinces

with Oudh, and the Punjab) are each under a Lieutenant-Governor; and of these Bengal alone has a legislative council. Three more, of less importance (the Central Provinces, British Burmah and Assam) are under a Chief Commissioner. In addition, there are some smaller tracts under the direct administration of the Governor-General. Within the provinces, the actual unit of administration is the District, which forms the charge of an officer, usually styled Collector. His principal duties are executive, magisterial, and fiscal; but he also exercises supervision over police, jails, schools, public works, forests, etc. Judicial functions are, as a rule, vested in other hands, subordinate to the high courts, with an ultimate appeal to the Privy Council in England. The staff of administration consists of: (1) the covenanted civil service, appointed after competitive examination in England; (2) the statutory civil service, selected from among natives; (3) military officers of the staff corps in civil employ; (4) a miscellaneous class of uncovenanted civil servants of different grades, who may be either Europeans or natives. The total area of India, including the outlying province of British Burmah and the settlement of Aden, in Arabia, (which is subordinate to Bombay,) amounts to 1,378,044 square miles; and the total population, according to the census of 1881, numbers 253,982,595 persons, showing an average of 184 persons per square mile. The area of British territory alone (excluding native states) is 868,314 square miles, with a population of 198,790,853 persons. Of the larger total, 187,937,438 are Hindoos by religion, 50,121,595 Mohammedans, 3,418,895 Buddhists (almost all in Burmah), 1,862,626 Christians (of whom less than 100,000 are Europeans), and 85,397 are Parsees (almost all in Bombay). In the official year ending March 1884, the total revenue of India amounted to £71,727,421, of which £22,361,899 was derived from the land (being in the nature of rent); £6,145,413 from the salt tax, £9,556,501 from opium (really paid by the Chinese consumer of the drug), while £14,120,404 represents gross profits from public works—railways and canals. The total expenditure was £70,339,025, showing a surplus of £1,387,496. The chief items were—army, £16,975,750; civil departments, £11,250,038; interest on debt, £4,276,266; public works (including working expenses and interest and all capital not borrowed), £18,614,594; exchange (being the difference between the nominal value of rs. per rupee and the actual value on all payments in England), £3,838,756. The total amount of debt bearing interest was £161,191,012, of which £68,065,478 bears interest in gold payable in England, £35,843,484 bears interest in silver payable in India, while £57,282,050 represents capital expended on remunerative public works. The railways of India have all been constructed directly by the State, or by private companies to which the State guarantees interest. In the calendar year 1883, the total number of miles open was 10,447; the total capital outlay, £148,395,646; the total net receipts, £8,427,609, showing an average return of 5.68 per cent. In the year ending March 1884, the total value of the merchandise imported into India amounted to £52,703,233, and of the merchandise exported to £88,035,139, showing an excess of £35,331,906 in the exports. The net importation of treasure was £11,898,204, thus reducing the true excess of exports to £23,433,702, which may be taken

roughly to represent the tribute of India to England for cost of administration and interest on capital invested. The chief items among the imports were: cotton goods, £24,108,331; metals, £5,175,543; machinery, £1,788,868; railway plant, £1,633,283. Among the exports: raw cotton, £14,401,902; opium, £11,294,460; oil seeds, £10,086,088; wheat, £8,895,811; rice, £8,363,280; indigo, £4,640,991; hides, £4,666,788; raw jute, £4,592,635; cotton manufactures, £4,309,037; tea, £4,134,221. In 1883-84, the established strength of the army was 63,065 Europeans and 126,919 natives; total, 189,084 officers and men. The total number of schools and colleges was 340,610, attended by 3,215,718 pupils, of whom only 197,889 were girls; the total expenditure on education was £2,164,918, of which £734,236 was defrayed by the State. In 1872, Lord Mayo, a most hard-working and popular viceroy, was assassinated by a Mohammedan fanatic, when visiting the convict settlement in the Andaman Islands. He was succeeded by Lord Northbrook, whose chief care was to restore order to the finances. In 1874, a famine that threatened the populous province of Bengal was successfully averted by the direct intervention of government. During the winter of 1875-76 the Prince of Wales made a tour through the country, and was welcomed with enthusiastic loyalty by all classes of the population, both in British and Native India. In 1876 Lord Lytton was appointed viceroy. On January 1st, 1877, the Queen was proclaimed Empress of India at a *darbar*, or state assemblage, held at Delhi, the historic capital of the Mogul Empire, which was attended by all the native princes and the heads of the British administration. During the two years 1877 and 1878 a famine raged throughout Southern India, more intense, more prolonged, and more wide-spread than any known in history. Despite an expenditure by the state of £11,000,000 on relief, the total number of deaths from starvation and disease was computed at 5,250,000. (See FAMINES IN INDIA.) After the famine came war. Shere Ali, the Ameer of Afghanistan, received a Russian envoy at his court, and turned back an English mission. Accordingly, in 1878, three British armies entered Afghanistan from India. Shere Ali fled into Turkestan and died there. A treaty was concluded with his son, Yakub Khan, by which a British envoy, Sir Louis Cavagnari, was stationed at Cabul. But after a few months, Cavagnari and his escort were murdered, and a second war became necessary. Cabul and Candahar were both occupied by British armies in the autumn of 1879, and Yakub Khan was sent a prisoner to India. During the following winter there was serious fighting round Cabul, where Sir F. Roberts was in command. A little later, a British army was defeated near Candahar, by Ayub Khan, one of the claimants to the Afghan throne. This disaster was avenged by Sir F. Roberts, after a brilliant march from Cabul to Candahar. Meanwhile, a general election in England had put the Liberal party in power. Lord Lytton resigned, and was succeeded by Lord Ripon (1880). Abdur Rahman Khan was recognised as Ameer of Afghanistan, and the whole country was gradually evacuated by the British. Lord Ripon's rule, though marked by no conspicuous incidents, will ever be memorable for his efforts to conciliate the natives and to extend to them the benefits of

local self-government. (See ILBERT BILL.) He retired in 1884, amid the rapturous applause of the natives of all classes; and was succeeded by Lord Dufferin, one of whose first duties was again connected with Afghanistan. An agreement had been concluded between the English and Russian governments to delimitate the Afghan frontier, where it had now become, by recent Russian advances, conterminous with Russian Turkestan. While the British surveying party were waiting near the frontier, the Russians, on the pretext of Afghan insolence, attacked and cut to pieces an Afghan force at Penjdeh (1885). At this very time, Abdur Rahman, whose loyalty to the British connexion has never been impeached, was a guest of Lord Dufferin, at Umballa. He returned home with substantial support in arms and money; and ultimately the quarrel with Russia was made up. Another petty war arose shortly afterwards, with Burmah (*q.v.*). By proclamation of Lord Dufferin (January 1st, 1886) Burmah was annexed to the Indian Empire, and military detachments were stationed throughout the country to secure its pacification. The annexation was confirmed by the House of Commons (Feb. 22nd, 1886). On March 24th Sir Auckland Colvin's financial statement was published, showing for 1884-85 a revenue of £70,690,681, and expenditure £71,077,127. The budget estimate for 1886-87 is: Revenue, £75,798,700; expenditure, £75,616,500, showing a surplus of £182,200.

India Office. See CIVIL SERVICE.

Indian Delegates. Towards the end of September 1885 it was determined to send delegates from the three Presidencies to acquaint the British public with what are deemed to be Indian grievances. The gentlemen deputed were **Mr. N. G. Chandavarkar, LL.B.**, of Bombay, **Mr. Salem Ramaswamy Mudaliyar**, of Madras, and **Mr. Manomohum Ghose (q.v.)**, of Calcutta, who was desired to become also the representative of two of the Bengal associations. After the arrival of these gentlemen in London an Indian Delegates Committee was formed, of which **Mr. William Digby, C.I.E.**, who had for some months previously been in correspondence with Indian reformers in Bombay on the mode in which English public opinion could best be turned to Indian affairs, became honorary secretary. All the parliamentary candidates in Great Britain were communicated with, and requested to state whether they were in favour of a parliamentary inquiry being instituted into Indian affairs: on the abolition of all special privileges and disabilities, based upon distinctions of race, connected with the administration of justice; on the larger employment of natives of India in the public service, and their appointment to offices under the Crown, irrespective of all considerations of race and creed; on the continuation and extension of the scheme of local self-government as developed by Lord Ripon; and on the re-organisation and constitution of the **Indian Legislative Councils** on a wider basis, involving the power of asking questions on public affairs and control of Presidency or provincial finance, and permitting the admission into the councils of a large proportion of representative Indians. Candidates were further asked whether, if the Council of the Secretary of State for India in London were retained, they would vote for the admission thereon of a certain proportion of Indians, and whether they would resist the an-

nounced determination to add very largely to the military expenditure on India. The delegates did not receive as many answers as they could have wished, but they and their sympathisers look to advantage in the future from the extensive dissemination of the native views effected in this country during the general election. The Indian deputation attended numerous public meetings in London and the great towns of England and Scotland; and some of these gatherings were presided over, or attended by, **Mr. Bright**, **Mr. Chamberlain**, and **Sir C. Dilke**. Interviews were obtained with these right honourable gentlemen, and also with the Marquis of Ripon, Lord R. Churchill, and other leading public men. Meetings were more frequently held under the auspices of leading Liberals than in connection with Conservatives; but the native representatives in no way formally associated themselves with either of the two great parties. The delegates returned to India at the end of 1885.

Indian Reform. The **Indian Reform Association** was established in 1884, with the object of informing the British public of all facts relating to the condition and desires of the people of India, so far as they can be ascertained from the best sources, and of collecting and diffusing accurate information in such a form as shall be intelligible to persons not acquainted with the technicalities of Indian life and administration; so that increased attention may be given to the welfare and progress of the Indian people. One of its principal aims is to insure the presentation of unofficial views on all matters which come before the British parliament for consideration, and to endeavour to secure the independent representation of Indian questions in parliament. The Association has offices in London, and several members of parliament and gentlemen having knowledge and experience of Indian affairs act as vice-presidents or as members of the committee.

Industrial Schools. See APPENDIX.

Industrial Schools Act, 1866. This Act consolidates previous legislation, and has not been much altered by subsequent Acts. An industrial school is defined as a school in which industrial training is provided and the children are lodged, clothed, and fed as well as taught. On the application of the managers of an industrial school the Secretary of State may order the inspector of industrial schools to examine and report upon its condition, and, if satisfied, may certify it by writing under his hand. A certified school must be inspected once a year. Its buildings can be enlarged or altered only with the approval in writing of the Secretary of State. Its rules of discipline must be approved by him, and its certificate may be withdrawn by him or resigned by the managers. The prison authority, whether in county or in borough, may under specified safeguards contribute to the expenses of a certified industrial school, or may contract with it for the maintenance of so many children as are sent there by order of the justices. The Treasury may contribute sums not exceeding 2s. per head per week for children detained on the application of their parents and guardians. The parent or other person legally liable to maintain the child must, if able to do so, contribute 5s. per week for his maintenance. Any person may bring before any justices any child under fourteen years of age who is found begging or wandering, and homeless or destitute.

tute (whether an orphan or having a surviving parent in prison), or living in the company of prostitutes or reputed thieves; and the justices, if satisfied, may send such child to a certified industrial school. A child charged with a criminal offence and less than twelve years of age, and a refractory child under fourteen years of age, whether in the care of a parent or guardian, or in the workhouse, may, if the justices are satisfied, be sent to such a school. Provision is made for sending a child, if possible, to a school conducted in accordance with his religious persuasion, and facilities for giving religious instruction are insured to clergymen of all persuasions. Nobody is to be detained in an industrial school after reaching the age of sixteen years, except with his own consent in writing. Escaping from a certified industrial school or assisting such escape is an offence punishable on summary conviction. Under the Elementary Education Act 1876, industrial schools for day scholars may be certified, and in respect of such schools, school boards have the same powers as have prison authorities. Under the Elementary Education Act 1879 a school board may establish any school of this kind to which they might have contributed under the Act of 1876.

Industrial Villages. The idea of combining in village settlements the cultivation of the soil by allotment holders, peasant proprietors, and co-operative farming, with handicraft workshops and home industries, has grown out of the facts described in another article (see HOUSING OF THE INDUSTRIAL CLASSES). The object of the Society formed to promote these village settlements is: (1) To prevent the continual influx of the agricultural population into the large towns, whither they drift chiefly in search of that employment which is becoming continually more scarce in rural districts, but partly also in the desire for some relief from the monotony of country life. (2) To offer such of the working population in the towns as may desire it, an escape from the misery, disease, and immorality caused by the overcrowding in the great centres of population. The means proposed are the directing capital and labour (1) to the purchase and cultivation of the soil under provisions for preventing the recurrence of those evils which have caused the present decay of agriculture in England, and overcrowding in towns, and which sometimes beset peasant cultivation abroad; (2) to the establishment of handicraft industries in the centre of those agricultural operations as a supplemental and alternative means of livelihood to agricultural employment, or *vice versa*; and (3) to the supply of means for that rational recreation, mental and moral improvement, and social intercourse, without which neither individuals nor communities can prosper. The Society above named mentions three modes of effecting its purpose: (1) The employment of an agent for bringing capitalists, investors, manufacturers, land-owners, and workmen together for united action and their common benefit; (2) the formation of a limited liability company to raise funds for making advances to reliable and enterprising manufacturers, artisans, and contractors; (3) the raising a benevolent fund, to be vested in trustees, for the same purpose. Plans for securing local representative self-government in each village, with all other arrangements necessary for the health and happiness, the mental and moral improvement

of a well-ordered community, are detailed in the publications of the Society. Offices: 12, Southampton Street, Strand, W.C.

Infusoria. A class of the lowest sub-kingdom (Protozoa) of the animal kingdom. First discovered in 1677, by Antony von Leewenhoeck (1632–1723). The "Philosophical Transactions" (1677) of the Royal Society, London, "contains a letter from him on the discovery." Henry Baker in 1742, O. F. Müller in 1773, worked the group out more fully. In 1836 Ehrenberg published his full descriptive account of them. The names and dates since then are Dujardin, 1841, Von Siebold, 1845, Stein, 1854, Claparède and Lachmann, 1858, Max Schultze, 1860, Haeckel and Bütschli. At first the microscopic living organisms found in vegetable infusions were called animalcules. Later they were known as infusoria. Even then the term included a heterogeneous mass of unicellular plants and animals, and multicellular and not infrequently highly developed animals. Now the class is a distinctively animal one, comprising all the one-celled Protozoa, with a distinct cell-wall, and within that a contractile cortical region inclosing protoplasm, in which is a nucleus and nucleolus. The Infusoria breathe either by the general surface or by contractile spaces containing water with air dissolved. They have no true sexual method of reproduction, but are reproduced asexually by fission or splitting into two, by gemination or the giving off of buds, by the formation within the cell-wall of spores that grow up into the parent form. This last process is usually preceded by conjugation of two infusoria. There are three orders of this class, recognised by their external appendages. (1) *Ciliata*, clothed with cilia or minute structureless hairs in ceaseless movement. (2) *Flagellata*, with one or more longer whip-like vibratile appendages (*flagellum*=a whip). (3) *Tentaculata*, with processes of the body-wall capable of some slight movement, and serving for the sucking-in of food. The families of these three orders are 80, the genera 300, the species 900. (Books of reference, William Saville Kent's "Manual of the Infusoria," Batschli's "Protozoa" in Brehm's "Classen und Ordnungen des Thierreichs.") See ZOOLOGY.

"Ingoldsby." See NOMS DE PLUME.

Ingram, Mr. William James, M.P., of Swineshead Abbey, Spalding, Lincolnshire, second son of Mr. Herbert Ingram, founder of the *Illustrated London News*, was b. 1847. Educated at Winchester and Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1872). Proprietor of the *Illustrated London News*. Returned in the Liberal interest as member for Boston (1874–80); re-elected (1885).

Innes, Earl of. See ROXBURGHE.

Inn-holders. The Worshipful Company of. See CITY GUILDS, THE.

Inoculation (an engraving), usually applied to the mode of transmission of disease whereby the "materies morbi" enters the body by the channel of a wound in the skin or mucous membrane. It may be *accidental*, as from a dissection-wound or dog-bite; or *intentional*, as prophylactic against a severer form of the disease from which it is intended to act as a protective—e.g., vaccination against small-pox, hydrophobia (*q.v.*), cholera (*q.v.*), and syphilis in the human being, or rabies in the dog, and splenic fever and pleuro-pneumonia in sheep and cattle. Inoculation is generally performed by injection under, or abrasion of, the skin. It

does not confer absolute immunity against the disease, but greatly diminishes the chances of its contraction, modifies the attack, and thus lessens the risk of death. This protection will in time wear out, and must therefore be repeated at the necessary period—*e.g.*, re-vaccination at the age of puberty. Inoculation is justifiable only in those cases in which the risk attending the artificial disease is infinitely less than of that which it is intended to avert; and this disease must be such as is not preventable by any known laws of sanitation. It may be **experimental**, whereby the life-history of a contagium and the transmissibility of disease can be studied in the lower animals. Experimental pathology has done much to elucidate the effects of contagion upon different animals, and thereby gives a knowledge of the best means to guard against it for their own benefit, as well as that of the human race. Since Rindfleisch (1866) first discovered the presence of micro-organisms (bacteria) in the tissues of those who had died of traumatic infective diseases, and Klebs demonstrated their causal connection, inoculation has been practised with greater exactitude and more definite object. The first attempt to produce traumatic infection in the lower animals was made by Coze and Feltz (Virchow and Hirsch—*Jahresbericht für 1866*), who found numerous bacteria in their blood when killed by the inoculation. Colin, Vulpian, Raynaud, and others obtained similar results, and Davaine found that a trillionth part of a drop of blood was sufficient to convey the infecting material and produce septicæmia. Klebs adopted the method of cultivation of diphtheritic organisms, and discovered both in the cultivating fluids and in the infected animals the characteristic bacteria. Orth reproduced erysipelas in rabbits in a similar manner. Dr. Koch positively asserts that "bacteria do not occur in the blood, nor in the healthy living tissues either of man or the lower animals." Dr. Watson Cheyne has also demonstrated this fact. The antiseptic method of treatment in surgery, which has afforded such brilliant results, is founded upon a similar belief (see **ANTISEPTIC TREATMENT**). Dr. Koch has shown that different species of animals are not always capable of infection by the same material: *e.g.*, the field-mouse cannot be inoculated by the blood of a house-mouse which has been killed by the injection of putrid blood, although it produces the same symptoms and death in one of its own kind even when a very minute quantity is used. Other contagia have a wider range: anthrax, for example, is capable of inoculating a great many animals, even of such diverse species as cattle, sheep, mice, rabbits, and man. This disease is frequently contracted by those men whose business it is to handle the skins of animals which have died of anthrax or splenic fever; hence it is popularly known by the name of "wool-sorter's disease." It is most fatal when it affects the lungs, or when large quantities of the spores are inoculated. Some animals are insensible to anthrax; and if the bacillus does not find a suitable nidus it perishes more or less quickly. Pasteur has shown that the "bacillus anthracis" has power to exist longer out of the body of an animal than most other bacteria, and has on this account advocated the practice of inoculation of sheep as protection against this disease. Koch says "a distinct bacteric form corresponds to each disease, and this form always remains the same,

however often the disease is transmitted from one animal to another; the differences between these bacteria are as great as could be expected between particles which border on the invisible." The number of the species of pathogenic bacteria is limited, and that which is fatal to one animal may be harmless to another of a different species. Different micro-organisms affect different tissues and organs, so that failure to communicate a specific disease has occurred from the use of a wrong medium to convey it. The diseases for which inoculation is practised as a preventive are at present few in number. Pasteur has succeeded in rendering sheep insusceptible to splenic fever, dogs to rabies, and chickens to chicken-cholera; hydrophobia in man (Pasteur) and Asiatic cholera (Ferran) are still *sub judice*. It is evident that in any case the virus used for inoculation must be subjected to a process of attenuation or change of character before being used, or protective and harmless results would not follow. The theory which at the present time best explains the cause of protection is—that the introduction of a harmless virus, by appropriating to itself and exhausting the material in the body prevents the specific pathogenic virus being able to find the conditions necessary to its vitality and multiplication. Vaccination in the human subject is the best illustration of this protective power: in it we have a virus which is undoubtedly capable of preventing the contagium of small-pox finding the means of development, except in a most modified form, and the chances even of that are much reduced. When vaccination is efficiently performed in infancy and re-vaccination at puberty, small-pox is no longer a disease to be dreaded. The nurses and attendants of small-pox hospitals, who are carefully re-vaccinated, enjoy absolute immunity from small-pox; and in the German army, where re-vaccination is carried out more thoroughly than in any other community, small-pox has been unknown for many years. See also **ANTI-VACCINATION**.

Inquests. See **CORONERS' INQUESTS (APPENDIX)**.

Insanity. Disorder of brain causing disorder of mind: most frequent between the ages of 25 and 40 years—*i.e.*, at the period of greatest development of brain; rarely acquired in the early years of life, but is sometimes congenital or due to arrest of growth and development of the mind, so that it becomes stunted and misshapen, so to speak—a like condition of the body being frequently co-existent. Past the period of middle life the frequency of insanity declines with increasing years until very advanced life, bringing with it degeneration of tissue, ushers in the time of second childhood. The principal **predisposing causes** are poverty, drink, consanguinity, pregnancy, lactation, immoral excess, epilepsy and other nervous disorders, and hereditary predispositions. **Exciting causes** may be religious or political excitement, overwork, mental shock, business or domestic troubles, intemperance, sunstroke, fevers, abscesses, tumours, lead and other poisons, heart disease, accidental injuries and necrosis of the bones of the ear or head. The classification of the different forms is by some authors based upon etiology, by others upon symptomatology, or by a combination of these methods. The Royal College of Physicians have published (1885) the following nomenclature: *viz.*, Hypochondriasis, mania, melanco-

lia, dementia (including acquired imbecility), idiocy or congenital imbecility, general paralysis of the insane, puerperal and epileptic insanity, insanity of puberty, climacteric and senile insanity, toxic insanity (from alcohol, gout, lead, etc.), traumatic insanity, associated with morbid change in the brain, and consecutive insanity from fevers, visceral inflammation, etc. In the early stages the symptoms are frequently due to increased blood supply (hyperæmia) of the brain, but sometimes to a deficiency of blood (anæmia), or to an inability of the lymphatics to carry off the waste products of the brain, so that the repair of the organ becomes impeded; want of sleep is often a prominent symptom, but is more frequently the effect than the cause of insanity; in any case it would appear that the proper discharges of nerve force are interfered with, and are either too much or too little, so that their proper balance cannot be maintained, resulting in the one case in mental excitement, in the other in mental depression. Treatment must be based upon the pathological condition; early removal from all accustomed surroundings is most essential. There is at the present time some danger that popular prejudice may militate against this, which all authorities agree gives the patient the best chance of recovery.

Insects injurious to Agriculture. A large and still increasing class, each new plant swelling the number by those which find in it their food. The most prominent of the British species, perhaps, are the aphid, or "green blight," in its various forms, the turnip-flea beetle, several of the wireworms, or grubs of the *Elater* beetles, the daddy-longlegs, and two or three of the saw-flies. Some little idea of the mischief wrought by these insects may be gained from the fact that, even so long ago as the year 1825, the first-named occasioned a loss to the revenue of nearly £450,000, owing to its ravages in the hop-grounds; while the turnip-flea, in the year 1876, caused damage to the extent of £100,000 in Devonshire alone. The applications commonly recommended in cases of insect attack are for the most part valueless, unless in small plots of land in which each plant can receive individual attention. For large farms, the best chance of securing satisfactory crops lies in plentiful manuring before the seed is put into the ground, the great desideratum being to accelerate the growth of the young plants, in order that they may quickly attain size and maturity sufficient to enable them to resist attacks which at an earlier stage of their development would prove fatal. It is also advisable to remove weeds and rubbish of every description from the fields, in order that insects dislodged from the crops by rain or wind may find no shelter. And too much stress cannot be laid upon the absolute necessity of encouraging such insectivorous birds as the starling, the titmouse, the rook, and the sparrow (*q.v.*), even although the two last named are themselves injurious to some extent at seedtime and harvest. The persecution of these is invariably followed by a corresponding increase in the abundance of insects, and the farmer who allows them free access to his fields will seldom have to complain of losses caused by insect agency.

Instinct. See ORIGIN OF SPECIES.

Insurance Companies. See FIRE AND LIFE INSURANCE.

Irish Nationalist Party. See POLITICAL PARTIES (ENGLISH).

Irish Peers. See HOUSE OF LORDS.

Irish Peers. The following is a list of peers of Ireland, who are not peers of Parliament. The figures in parentheses give the date of the creation of the title:—

Antrim (1785), William Randal M'Donnell, 6th Earl of, was b. 1851; s. 1869. Mar. (1875), Louisa Jane, 3rd dau. of General Charles Grey. Is descended from the Lords of the Isles. Is D.L. co. Antrim.

Ashbrook (1751), William Spencer Fowler, 7th Visct., was b. 1830; s. 1882.

Ashtown (1800), Frederick Oliver Trench, 3rd Baron, was b. 1868; s. 1880.

Avonmore (1800), Algernon William Yelverton, 6th Visct., was b. 1866; s. 1885.

Aylmer (1718), Adolphus, 7th Baron, was b. 1814; s. 1858. Is a colonel of the Canadian Militia.

Bantry (1816), William Henry Hare Hedges White, 4th Earl of, was b. 1854; s. 1884. Late lieutenant West Cork Artillery.

Bellew (1848), Edward Joseph, 2nd Baron, was b. 1830; s. 1866. His ancestors were among the first Anglo-Norman settlers in Ireland. A D.L. for co. Louth.

Carberry (1715), George Patrick Evans Freke, 7th Baron, was b. 1810; s. 1845.

Carriek (1748), Somerset Arthur Butler, 5th Earl of, was b. 1835; s. 1846. Formerly in the Grenadier Guards.

Castle-Stewart (1800), Henry James Stuart Richardson, 5th Earl of, was b. 1837; s. 1874.

Cavan (1647), Frederick John William Lambart, 8th Earl of, was b. 1815; s. 1837. Mar. (1838) Caroline Augusta, dau. of the 1st Lord Hatherton. A D.L. for Somerset. Eldest son, Viscount Kilcourse, M.P.

De Blaquiére (1800), William Barnard de Blaquiére, 5th Baron, was b. 1814; s. 1871. Retired captain Royal Navy. Descended from a noble French family.

Desart (1793), William Ulick O'Connor Cuffe, 4th Earl of, was b. 1845; s. 1865. Is a D.L. co. Kilkenny.

Decies (1812), William Robert John De La Poer Horsley Beresford, 3rd Baron, was b. 1811; s. 1855. Formerly capt. Grenadier Guards.

Chetwynd (1717), Richard Walter Chetwynd, 7th Visct., was b. 1823; s. 1879. Formerly in the 14th Dragoon Guards. Is D.L. for Staffordshire.

Glanmorris (1800), John George Barry Bingham, 5th Baron, was b. 1852; s. 1876. Formerly in the Rifle Brigade. Is D.L. co. Mayo.

Clarina (1800), Eyre Challoner Henry Massey, 4th Baron, was b. 1830; s. 1872. Is a major-general and Knight of the Legion of Honour. Late lieut.-colonel 95th Foot.

Dillon (1622), Arthur Edmund Denis Lee Dillon, 16th Visct., was b. 1812; s. 1879. Formerly a clerk in the Home Office. The family settled in Ireland and obtained grants of land there in the 12th century.

Downe (1680), Hugh Richard Dawnay, 8th Visct., was b. 1844; s. 1857. Is major and Life Guards, and aide-de-camp to the Duke of Connaught. Mar. 1869, Lady Cecilia, only dau. of the 3rd Earl of Sefton.

Dunaleigh (1800), Henry O'Callaghan Prittie, 4th Baron, was b. 1851; s. 1855. Formerly in the Rifle Brigade. Is a D.L. for co. Tipperary.

Dunboyne (1324), James Fitz-Walter Clifford Butler, 24th Baron, was b. 1839; s. 1881. Is a D.L. for Monmouthshire.

Farnham (1756), James Pierce Maxwell, 9th Baron, was b. 1813; s. 1884. Sat as M.P. for Cavan, 1843-65. Is lieutenant-colonel, and served in the Crimea, where he was severely wounded.

Fermoy (1856), Edward Fitz-Edmund Burke Roche, 2nd Baron, was b. 1850; s. 1874. Is a D.L. for co. Cork.

Ffrench (1798), Thomas Ffrench, 4th Baron, was b. 1810; s. 1860. Is a D.L. for co. Galway.

Frankfort (1816), Lodge Raymond de Montmorency, 2nd Visct., was b. 1806; s. 1822. Formerly lieutenant 10th Hussars.

Galway (1727), George Edmund Milnes Monckton Arundell, 7th Visct., was b. 1844; s. 1876. Is M.A. Oxford, lieutenant-colonel Nottinghamshire Regiment of Yeomanry. Is a D.L. for Notts. Sat for North Notts 1872-85.

Garvagh (1818), Charles John Spencer George Canning, 3rd Baron, was b. 1852; s. 1871. Is M.A. Oxford; J.P. and D.L. co. Derry; lieutenant North Irish Division Royal Artillery.

Gort (1816), Standish Prendergast Vereker, 4th Visct., was b. 1819; s. 1865. Is hon. colonel 4th Brigade South Irish Division Royal Artillery.

Graves (1794), Clarence Edward Graves, 4th Baron, was b. 1847; s. 1870. Is a retired lieutenant Royal Navy.

Guillamore (1831), Hardress Standish O'Grady, 5th Visct., was b. 1841; s. 1877. Retired major Royal Artillery. D.L. for co. Limerick.

Harborton (1791), James Spencer Pomeroy, 6th Visct., was b. 1836; s. 1862. M.A. Cambridge. Mar. (1861) Florence, dau. of W. W. Lerge, Esq.

Hotham (1797), John Hotham, 5th Baron, was b. 1838; s. 1872. Is a D.L. Yorkshire. Formerly in the Royal Navy, and served in the Crimean campaign.

Huntingfield (1796), Charles Andrew Vaneck, 3rd Baron, was b. 1818; s. 1844.

Kilmaine (1789), Francis William Browne, 4th Baron, was b. 1843; s. 1873. Is a D.L. for co. Mayo.

Kingsale (1181), John Fitzroy de Courcy, 31st and premier Baron of Ireland, was b. 1821; s. 1874. Is descended from John, first Earl of Ulster, who invaded the province in 1187, and to whom and whose successors was granted the privilege which the present Baron enjoys of remaining covered in the presence of the Sovereign. Formerly of the 47th Regiment, and served in the Crimea.

Kingston (1768), Henry Ernest Newcomen King Tenison, 8th Earl of, was b. 1848; s. 1871. Is captain in the Connaught Rangers.

Langford (1800), Hercules Edward Rowley, 4th Baron, was b. 1848; s. 1854. Late lieutenant-colonel Grenadier Guards.

Liaburne (1776), Ernest Augustus Malet Vaughan, 5th Earl of, was b. 1836; s. 1873.

Lisle (1758), John Arthur Lysaght, 5th Baron, was b. 1811; s. 1868.

Louth (1541), Randal Pilgrim Ralph Plunkett, 14th Baron, was b. 1868; s. 1883.

Macdonald (1776), Ronald Archibald Bosville Macdonald, 6th Baron, was b. 1853; s. 1874. Is a D.L. for Inverness.

Mayo (1785), Dermot Robert Wyndham Bourke, 7th Earl of, was b. 1851; s. 1872, his father, who was then Governor-General of India, being assassinated while visiting the Andaman Islands. Late lieutenant Grenadier Guards.

Mexborough (1766), John Charles George

Savile, 4th Earl of, was b. 1810; s. 1860. Mar. (1842) Rachael Katherine, eldest dau. of the 3rd Earl of Orford. Is an M.A. (Camb.); a D.L. West Riding. Was M.P. for Gotton, and subsequently for Pontefract.

Molesworth (1716), The Rev. Samuel Molesworth, 8th Visct., was b. 1820; s. 1875. M.A. of Cambridge. Is Rector of St. Petrock, Cornwall.

Mountcashell (1781), Stephen Moore, 4th Earl of, was b. 1825; s. 1883. Is a D.L. co. Cork.

Mountgarret (1550), Henry Edmund Butler, 13th Visct., was b. 1816; s. 1846. M.A. (Oxon.), D.L. co. Kilkenny.

Mountmorres (1763), William Geoffrey Bouchard de Montmorency, 6th Visct., was b. 1872; s. 1880.

Munceaster (1783), Josslyn Francis Pennington, 5th Baron, was b. 1834; s. 1862. Formerly captain Rifle Brigade. Was M.P. (C.) for West Cumberland, 1872-80. Returned for Cumberland (Egremont Division), 1885. Is Lord Lieutenant of Cumberland.

Muskerry (1781), Hamilton Matthew Tilson Fitzmaurice Deane Morgan, 4th Baron, was b. 1854; s. 1868.

Newborough (1776), Spencer Bulkeley Wynn, 3rd Baron, was b. 1803; s. 1832. D.L. for Carnarvonshire.

Norbury (1827), William Brabazon Lindsay Toler, 4th Earl of, was b. 1862; s. 1873.

Radstock (1800), Granville Augustus William Waldegrave, 3rd Baron, was b. 1833; s. 1857.

Rathdonnell (1868), Thomas Kane McClintock Bunbury, 2nd Baron, was b. 1848; s. 1879. Late of the Scots Greys. Is D.L. co. Louth.

Rendlesham (1806), Frederick William Brook Thelluson, 5th Baron, was b. 1840; s. 1852. Is a D.L. Suffolk. Was M.P. for East Suffolk, 1874-85; unsuccessfully contested the South-Eastern Division of that county, 1885.

Sherard (1627), Phillip Castell Sherard, 9th Baron, was b. 1804; s. 1859.

Southwell (1776), Arthur Robert Pyers Southwell, 5th Visct., was b. 1872; s. 1878.

Taafe (1628), Edward Francis Joseph Taafe, 11th Visct., was b. 1833; s. 1873. Is Chamberlain and Privy Councillor to the Emperor of Austria, and President of the Austrian Ministry.

Teignmouth (1797), Charles John Shore, 3rd Baron, was b. 1840; s. 1885. Formerly captain Scots Guards.

Valentia (1622), Arthur Annesley, 11th Visct., was b. 1843; s. 1863. Late lieutenant 10th Hussars. Unsuccessfully contested Oxfordshire (Woodstock Division) 1885.

Wallscourt (1800), Erroll Augustus Joseph Henry Blake, 4th Baron, was b. 1841; s. 1849. Mar. Lady Jane Harriet Stanhope, dau. of the 7th Earl of Harrington. Formerly captain Coldstream Guards.

Waterpark (1792), Henry Anson Cavendish, 4th Baron, was b. 1839; s. 1863. D.L. for Derbyshire.

Westmeath (1621), Anthony Francis Nugent, 11th Earl of, was b. 1870; s. 1883.

Wicklow (1793), Cecil Ralph Howard, 6th Earl of, was b. 1842; s. 1881. Formerly major North Irish Division Royal Artillery. D.L. for co. Wicklow.

Winterton (1766), Edward Turnour, 5th Earl, was b. 1837; s. 1879. Mar. (1882) Lady Georgiana S. Hamilton, dau. of the 1st Duke of Abercorn.

"Irish People." See FENIANS.

Iron and Steel. Most generally iron is employed in three different forms—namely, cast

iron, wrought iron, and steel. **Cast iron** is a hard and comparatively brittle substance of crystalline character, which can be fused at a high temperature and moulded. Wrought or malleable iron is soft and tenacious, its structure being fibrous. **Steel** forms an intermediate link between ordinary cast and malleable iron, and unites within certain limits the properties of both. Steel is produced in a variety of ways, but the methods now adopted in most countries for producing steel, especially in large quantities, are the **Bessemer**, the **Siemens-Martin**, and the **Thomas-Gilchrist** processes, which are named in the order of their invention. By the latter process, steel is successfully produced from iron obtained from inferior ores of the more highly phosphuretted kind, which could not be converted into good steel by either of the other methods. There are a great variety of iron ores, and their geological distribution is very unequal, their maximum development, however, appearing to be in the older rocks. Deposits of iron of one kind or other occur all over the known world, and they are worked wherever there is fuel at hand, or within a convenient paying distance. In 1740, or 146 years ago, the make of pig iron in the United Kingdom was under 20,000 tons; in 1880 it was 7,500,000 tons. The review of the iron trade for 1885 (see also **TRADE OF 1885**) is not, we regret to say, of an encouraging character. As usual with the opening of the year, hopes were expressed of improving business; but the results prove that there has been a decline. The exports of iron and steel for the first eleven months of 1885 amounted to 2,910,347 tons, or £20,128,374 in value, against 3,267,490 tons, and £22,707,778 in 1884. An exceedingly heavy falling away in the demand in the shipbuilding yards (see **SHIPS AND SHIPBUILDING**) had much to do with this decline. For the whole year the production of **pig iron** in Scotland amounted to 1,003,562 tons, and of **malleable iron and steel** to 441,366 tons; in 1884 the ton-nages were 988,000 and 387,000. At the end of 1885 the stocks of pig were 1,050,683 against 821,000 tons; the highest price of "G.M.B. warrants" in 1885 was 43s. 11d., and the lowest 40s. 7d.; in 1884 they were 44s. 7d. and 40s. 10d. respectively. In Cleveland the work in the great ironstone mines averaged five days a week, 7,000 persons or thereabouts being employed; and the output for 1885 was calculated to be practically the same as the previous year—viz. some 6,052,600 tons; the wages of the iron miners, however, fell 4 per cent. during the twelvemonth. The total make of pig iron in this district for 1885 was returned at 2,458,889 tons, including a proportion of about 670,000 tons of hæmatite, showing an increase in the make of **Cleveland iron** amounting to 70,000 tons, but a decrease of other descriptions of about 100,000 tons. In January 1885 there were 95 furnaces blowing, and 98 in December. During 1885 the total quantity of pig iron shipped from Cleveland was 840,000 tons, against 927,000 in 1884; the coastwise consignments were 466,000 tons, of which Scotland took about 350,000, a larger quantity than in any year since 1876. The falling off was principally in the **foreign exports**. Germany in 1885 took 119,000 tons, against 158,000 in 1884; Russia 18,000, against 47,000 in 1884; and France 53,000, against 73,000 in 1884. The prices show a considerable drop during the year, "No. 3 G.M.B. Cleveland" in January 1885, being at 35s. 3d. prompt

delivery, and as low as 31s. 9d. at the end of the year. The stocks were very heavy at the end of 1885, being returned at 517,588 tons in public and private stores—an increase of 178,799 tons on the year. The shipments of finished iron and steel from **Middlesbrough** in 1885 were about the same as in 1884—viz., 374,193 tons. The wages of blast-furnacemen were reduced $\frac{3}{4}$ per cent. during the twelvemonth. An estimate of the trade in the great **Black Country** district is to the effect that pig fell 2s. 6d. per ton during 1885, common bars and gas-tube strip, 10s., single sheets 10s., and doubles 15s. As to wages, Alderman Avery, the umpire of the Local Wages Board, towards the end of the year gave his award, reducing the puddlers' wages to 6s. 9d. per ton. It is interesting here to note that the highest price ever paid for puddling in South Staffordshire was in 1873, when 13s. 3d. was the price for long weight and 12s. 5d. for short weight. At that time bars were selling at £15 per ton. At the beginning of December 1885 they were at £5 5s., and puddlers' wages 7s. 3d. The award is current in North and South Staffordshire, Shropshire, Derbyshire, South Yorkshire, Cheshire, Lancashire, and at several works in South Wales. In the **Lancashire** district, pig iron at the beginning of 1885 was at 41s. to 42s., and at the end it stood at 39s. to 39s. 6d.; but hæmatites showed a revived tone, going up from 51s. and 51s. 6d. to 53s. 6d. and 54s. The finished iron and steel trades were also dull, with one or two brilliant exceptions—for at Barrow the great Steel Works Company took an order from the late Mr. W. H. Vanderbilt to supply 30,000 tons of steel rails to be delivered at a fair price at New York; during the last six months, too, Messrs. Pearson, Knowles & Co., Warrington, turned out the great quantity of 50,000 of manufactured iron and steel. At **Sheffield** it is pointed out as indicative of the trade that in 1885 only £450,000 worth of goods were sent to the United States, against £630,686 in 1884, and £811,212 in 1883. Some reference has been made to the manufacture of **basic steel**. This is a process of eliminating phosphorus from impregnated ores by means of a flux of basic lime, the converting chamber also being lined with the same material, the inventors or discoverers being Messrs. Thomas and Gilchrist (mentioned above). The means of thus using up poor ores, or those which are highly phosphoretic, such as the Cleveland ironstone, were welcomed as affording an opportunity of cheapening steel. For the year ending September 1885 no less than 945,317 tons of steel and ingot iron were made by this process all over the world, England turning out 145,707 tons; Germany and Austria 617,514; France, 130,582; Belgium and other countries 51,514 tons. No less than 600,183 tons of this quantity were produced with less than 0·8 per cent. of carbon. Considerable discussion was caused during the latter part of the year in reference to certain peculiarities having been discovered in some classes of steel, **Bessemer**, **Siemens**, or **basic** descriptions; and a public correspondence is still going on, the general complaint apparently being directed against the high percentage of phosphorus present in the manufactured article. The year 1886 began with the announcement of several large contracts having been secured in the **Black Country**: 40,000 tons of steel rails and 40,000 tons of accessories for the Victorian Government, and £50,000

worth of work for the Indian Telegraph Department. Then the new and highly interesting **Congo Railway** scheme is floated, with its capital of £2,000,000, Mr. J. F. Hutton, M.P., president of the Manchester Chamber of Commerce, being one of the signatories to the concession; further, the new Chinese Loan of £35,000,000 is to be issued in London and Berlin, and it is known that the money is to be chiefly spent in armaments and railways. The annexation of **Upper Burmah** without doubt will open the way for the construction of the great network of Burmese and Siamese lines so long talked of. Altogether, therefore, the prospects of the iron and steel trades at the commencement of 1886 might naturally be considered fairly favourable. At the end of January 1886 the accountant to the **Board of Conciliation and Arbitration** for the manufactured iron trade of the North of England issued his return for the last two months of 1885. He found that the net average selling price of rails, plates, bars, and angles was £4 15s. per ton, the total production being 43,028 tons, showing a very marked decline on the preceding two months, when the output amounted to 61,000 tons. These figures complete the record for the year. In 1885 the firms connected with the Board produced 355,235 tons of rails, bars, plates, and angles; or, adding two firms outside the Board, whose production was reckoned the previous year, the total is 380,000 tons, against 428,000 tons in 1884 and 657,000 tons in 1883. Compared with 1879 the output of 1885 shows an increase of over 50,000 tons; in prices, however, the difference is in the other direction. In 1879 the lowest selling price of the commodities named was £5 3s. 3d.; at the end of last year (1885) the point touched was 8s. 3d. below this minimum.

Ironmongers, The Worshipful Company of. See CITY GUILDS, THE.

Irridentists. Members of the "Italia Irredenta" (Unfreed Italy), a political organisation promoted in Italy in 1878. The organisation aims at freeing all Italians from foreign rule, and at reuniting to the Italian kingdom all those portions of former Italy which have passed under foreign domination. The "Italia Irredenta" is especially directed against Austria, the chief sphere of its agitation being the South Tyrol (Trient) and Trieste.

Irrigation, or aquaculture, is the watering of land by artificial means. Its purpose is to supply the deficiencies of rain-water, and provide sufficient moisture in the soil for the support or accelerating the growth of vegetation; or to deposit on the land fertilising matters which are conveyed by the water. It is found that when the daily evaporation from the leaves of plants exceeds that taken up by the roots, the plants droop and die, unless a certain amount of moisture, or water, be added to the soil. In tropical and semi-tropical countries, where the climate is warm and dry, irrigation is carried out on an extensive scale, and at considerable expense; but in this and in other countries of the northern hemisphere, where the climate is humid and temperate, irrigation is not so necessary. The application of water to the soil has both a mechanical and chemical effect. In the first instance it softens the soil and renders it more penetrable by the plough and the roots of plants. Water is also a conveyer and distributor of food to the plant, which can only receive nourishment in a liquid condition. By what it contains in suspension

or solution, water adds to the food-stores of the soil. It also modifies the temperature of the soil, and protects the plant from the effects of frost; promotes the germination of the seed; accelerates the growth, and increases the yield of vegetation. In the second instance, water, when it contains nothing of a noxious character, dissolves and liberates, with the aid of the carbonic acid and nitrogenous compounds, which it contains in solution, the stores of food in the soil for the use of the plant. But irrigation must go hand in hand with an efficient means of drainage, to draw off the water by gradual percolation, or in large quantity at intervals, in the case of flooding. A good supply of water has been known to increase the value of arable land from four to ten fold. There are several modes of applying irrigation. Streams or springs running down from uplands are tapped, and run into channels, courses, and furrows, ramifying through lands at lower levels. In Colorado, and in some of the States of America, this system is carried out extensively. Rain-water is stored in reservoirs and tanks, and used when required, as in the dry interior districts of Australia; tube wells are also sunk, and the water is allowed to flow in a system of channels to the lower plains, as in California. In these countries, and in Egypt, India, the southern parts of France, Spain, Italy, vast tracts are now contributing bountiful harvests which would otherwise have been barren. In these cases irrigation is adopted simply to moisten the ground, and supply deficient rainfall. In this country the system is chiefly confined to the watering of meadows, over which the water is allowed to flow and rest for a time, depositing its sediment, and supplying food direct to the roots of the grasses. The process begins in October, and is carried on at intervals of a fortnight or three weeks at a time. These irrigated meadows afford early spring grass, on which stock are fed, particularly ewes and lambs; and they produce a good crop of hay and aftermath. Professor Johnson says, "The deserts of the world are not sterile because they cannot yield the soil-food required by vegetation, but because they are destitute of water." Light, porous soils, such as sands and gravels, are the most suitable for irrigation. The plants which benefit most from irrigation are rye-grass and lucerne, cabbage, beet, and turnip. It is applied with benefit to corn crops, up to the period of inflorescence. Among the other plants grown frequently with artificial supplies of water are the madder, sugar-cane, and rice plant; the latter being irrigated by tide swamping in India and Egypt. Water from rivers containing the sewage of towns, or with a large quantity of suspended matter, or which passes through lands highly manured, is most suitable for irrigation; that direct from tanks, wells, and springs not so suitable. Irrigation in gardens, orchards, and nurseries, is carried on on a small scale by means of pipe and hose, water drills, carts, and syringes. There are several sewage farms of irrigated meadows in this country, such as at Edinburgh, Cheltenham, and Bedford. **Sewage irrigation** generally consists in flooding with large quantities of sewage a number of successive breadths of land. The greatest luxuriance of growth known to English agriculture is obtained by sewage irrigation. A cutting of ten to twenty tons of succulent forage is obtained as

the result of about a month or five weeks' growth. The sewage is run on the land at the rate of 400 tons per acre, equal to a thickness of four inches; the sewage being drawn on a few hours twice in the growth of a single crop or cutting. Drainage, tillage, and sub-soiling accompany this system, when the land is laid up dry. **Warping**, or sifting, is the repeated flooding of low-lying tidal or river lands, fulfilling the double purpose of fertilising the land and raising the surface of low swampy ground.

"Irving, Henry." The "stage name" of Mr. John Henry Broderick, the famous actor. He was b. at Keinton, Glastonbury, 1838. Educated by Dr. Pinches at his school, George Yard, Lombard Street, London. After developing a talent for the stage as an amateur, he appeared at the Sunderland theatre in 1856, and at Edinburgh early in 1857, remaining in that city for two-and-a-half years. Appearing at the Princess's Theatre, London, in September 1859, he stayed there for about three months. In April 1860 Mr. Irving proceeded to Glasgow, where he played till the end of the ensuing September; subsequently going to the Manchester Theatre Royal, the engagement in this instance continuing till April 1865. During his stay in this city he appeared, in conjunction with Mr. F. Macaboe, in an exposure of the **Davenport Brothers**, the "spiritualistic mediums," and on leaving was accorded a benefit in the Free Trade Hall, Peter Street. From January 1866 to July of that year Mr. Irving was engaged at the Prince of Wales's Theatre, Liverpool, and then returned to Manchester. A London engagement followed at the St. James's Theatre, where he played in various characters. In December 1867 he was engaged at the Queen's Theatre, Long Acre (now converted into a manufactory), and at various other houses, till in the spring of 1870 he made a great success as **Digby Grant** in the well-known comedy of the **"Two Roses"** at the Vaudeville Theatre, which he sustained for about a twelvemonth. In November 1871 Mr. Irving made his first appearance at the **Lyceum Theatre**, which in future will always be associated with his name. He opened in **"The Bells,"** a thrilling piece, in which his peculiar talents shone with undoubted effect. At this theatre, under Mrs. Bateman's management, Mr. Irving scored a series of remarkable successes subsequently, in **"Charles I."** and **"Eugene Aram"** (by Mr. Wills), **"Richelieu"** and **"Hamlet"**—his Shakespearian revival being a red-letter day in the history of the drama (1874). His pronounced claim as an English tragedian was further emphasized in September 1875 by the production of **"Macbeth,"** and **"Othello"** (1876), and then followed an artistic and interesting study in the **Philip of the Poet Laureate's "Queen Mary."** A triumphal tour was next undertaken in England, Scotland, and at Dublin, **"Hamlet"** being played in the latter city before the Duke of Connaught and the Viceroyal Court. At the Lyceum, in 1877, **"Richard III."** was produced, and then the curious piece **"The Lyons Mail,"** in which Mr. Irving "doubled" in **Dubosoq** and **Lesurques**. This was followed by the poetical drama **"Vanderdecken."** In the December of that year Mr. Irving took over the Lyceum from Mrs. Bateman, and revived **"Hamlet."** Since this time that theatre has been looked upon as the home in England of high dramatic art, and both as actor and manager Mr. Irving has spared neither pains

nor expense in the representations he has undertaken. In **"Othello"** he for one season alternated the characters of Othello and Iago with Mr. Edwin Booth, the American tragedian, and to exhibit the scope of his peculiar genius he at one time played **"The Bells,"** with an adaptation of one of Dickens's well-known characters, **"Jingle,"** as an afterpiece. Mr. Tennyson's later piece, **"The Cup,"** was also produced at the Lyceum (1881), the stage mountings of the ancient surroundings being perfect. In July 1883 Mr. Irving was accorded a public banquet at St. James's Hall, Lord Coleridge presiding over a brilliant company, previous to his first visit, with Miss Ellen Terry (*q.v.*) and the rest of the now far-famed **Lyceum Company**, to the United States. The experiences of this little band of artistes in America were unprecedented: as in the case of Mr. Charles Dickens's first visit, speculators bought up all the tickets, and admission to the theatres could only be obtained at "famine" prices. A second visit to that country was made in 1885; and his return at the latter end of that year was marked by the unprecedented success of a new dramatic version of **"Faust,"** Mr. Irving taking the part of Mephistopheles, which in his hands appeared to be a new creation.

Isaacs, Mr. Lewis Henry, M.P., was b. 1830, at Manchester. Educated at the Royal Lancashire Gram. Sch. and Univ. Coll., London. He is surveyor to the Holborn Board of Works, and was the architect of the Holborn Town Hall and of the Northumberland Avenue Hotel. Returned in the Conservative interest as member for Walworth (1885).

Ischia. See EARTHQUAKES.

Ismail Pasha, ex-Khedive of Egypt, was b. at Cairo in 1830. He is the father of the present Khedive, Tewfik Pasha. He ascended the throne of Egypt January 18th, 1863. Previously educated at Paris. Under his reign the negotiations with M. de Lesseps for the construction of the Suez Canal took place. In 1866 he visited many of the capitals of Europe, and invited many sovereigns to be present at the inauguration of that great engineering work. In 1873 he obtained from the Sultan a firman giving autonomy to Egypt, and assuring to his family the khedivate of Egypt. In 1875 he sold to the Government of England, through the agency of Lord Beaconsfield, his shares in the Suez Canal for the sum of £4,000,000. But Ismail Pasha had, in consequence of his extravagance, brought the Egyptian finances into so bad a condition towards the end of 1875, that Mr. Stephen Cave, M.P., and Colonel Stokes, R.E., were sent by the English Government to report on the financial position. In 1876, Mr. Goschen for the English, and M. Joubert for the French bondholders, were dispatched on a similar mission. From these proceedings the Dual Control had its origin. In June 1879 Ismail Pasha was deposed by virtue of a firman from the Sultan, obtained at the solicitation of England and France, by which Tewfik, his son, was raised to the throne. Ismail Pasha has recently (March 1886), made a claim against the Egyptian Government for £5,000,000, which at present is *sub judice*.

Italy. A kingdom governed by Humbert I., second constitutional King, assisted by a Senate (composed of the Princes of the royal house and of royal nominees of eminence, paying taxes to annual amount of £120), and Chamber

of Deputies, elected by all citizens over twenty-one who can read and write, and pay annual taxes amounting to 16s. 8d. Population about 28,460,000; area 114,410 square miles; revenue on June 30th, 1885, £62,519,000; expenditure £62,227,000; national debt £406,500,000. Army (first line) 690,000, second line 300,000, third line 1,000,000; navy, twenty-two armour-clad vessels of exceptional power, and seventy-four others. The army, it may be noted, is kept at an abnormal strength as a means of educating and disciplining the more backward parts of the nation—e.g., the population of the Two Sicilies, Sardinia, and the late Papal States. The Pope is the spiritual head of the Roman Catholic world, and enjoys the dignity of a reigning prince. He is selected by a two-thirds vote, taken by ballot, of the College of Cardinals, which consists of seventy members and acts as his Council of State. Temporal power taken away in 1870, but he retained his sovereign rights, his guards, palaces, etc., free from taxes and from the jurisdiction of the common law of the land. In 1870 Italy was ruled by Victor Emmanuel, with the exception of the so-called Patrimony of St. Peter, the freedom of which was guaranteed by the "September Convention" between France and Italy. Pope Pius IX. summoned Ecumenical Council at Rome: doctrine of Papal Infallibility promulgated; session interrupted by Franco-German war. After Sedan Victor Emmanuel declared himself released from September Convention, and occupied Rome and its territory. The Assembly voted Rome to be the capital on Dec. 5th, and on Dec. 31st the King made his public entry. In 1871 the Mont Cenis Tunnel Railway was opened. Pope held Jubilee. The government since 1848 had been mainly in the hands of the Moderate Party, at first under the leadership of Cavour (*q.v.*), by whose ideas they professed to be guided. Great efforts were made to educate the people and to secure balance of the finances, and the country made great progress in spite of heavy taxation. In March 1876 the Moderates were driven from power, and replaced by a Progressist ministry under Depretis. In 1878 Victor Emmanuel died, and was succeeded by his son Humbert, the present King. Pope Pius IX. also died in the same year, and was succeeded by Leo XIII. In March the Depretis ministry resigned, and were succeeded by the Caroli administration taken from the same party, but Caroli only retained office until December, when he was replaced by Depretis. In November an unsuccessful attempt was made upon the life of the King. An agitation for the annexation of Italia Irredenta (viz. the Italian Tyrol and Trieste) arose, but subsided, and Italy soon after joined with Germany and Austria in an alliance for mutual defence. In 1879 a treaty of commerce was concluded with Austria. A Caroli ministry was installed in July, on the questions of the abolition of the grist tax and electoral reform. Strong Irredentist agitation, and Austrian ambassador insulted at Rome in December. In May severe eruption of Mount Etna; in June the low-lying districts round Mantua visited by severe inundations. In July 1880 the abolition of the grist tax, to take effect during three years, was decreed. Italy also took part in the so-called naval demonstration against the Porte, which ultimately resulted in the cession of the port of Dulcigno to Montenegro. In April 1881 the

large surplus in the budget allowed the abolition of the forced currency to be initiated. Demonstrations in Rome for abolition of law of guarantee and for electoral reform took place. Great indignation at the occupation of Tunis by the French, and consequent fall of the Caroli ministry. His opponents failing to form a Government, Caroli resumed office; refused to recognise the Bardo Treaty, but renewed commercial treaty with France; ambassadors, however, mutually withdrawn. In 1882 the present franchise law was passed, also laws establishing the *scrutin de liste*, electoral districts, etc. The budget, also, was the most favourable yet presented. Existing commercial treaties with England, Germany, Belgium, Spain and Switzerland prolonged to March 1883. New Commercial Code approved. Improved relations with France on Tunis question, and ambassadors returned at close of year. Policy of abstention adopted with reference to the despatch of an Anglo-French squadron to Egypt. Assab, a port on the Red Sea, bought by Rubattino Co. in 1870, declared a colony and free port. Severe inundations in autumn in Lombardy. Garibaldi died on June 2nd, and was buried in Caprera. General elections resulted in favour of Government, as shown by the passage of the Oaths bill by overwhelming majority, obtained by coalition between the Conservatives and that portion of the Left which supported Depretis. 1883. Forced currency withdrawn and specie payments resumed in March. Budget statement very favourable. Vote of confidence in Government, and reconstruction of cabinet on more Conservative basis. Hitherto numerous ministerial crises had been caused by abstention of Clericals from polls; the present triumph gained by improved discipline of the Right and Clerical parties. Strong Conservative reaction. 1884. Removal of ashes of Victor Emmanuel to Pantheon, Jan. 7th. Numerous pilgrimages to his tomb. Court of Cassation decreed that property of Propaganda was subject to law of disestablishment, and liable to tax accordingly. A bill giving autonomy to Universities, leaving secondary education to provincial authorities and primary education to State control, passed by narrow majority. Cabinet, in consequence, altered in detail. Severe attack of cholera at Naples. Death of the eminent financier Sella in March. On Dec. 20th adhesion to the Anglo-Egyptian Convention of 1877, for suppression of slave trade, declared. Rupture with Colombia. The majority of the Depretis ministry in the Chamber, which was 61 on May 8th, 1885, having on June 8th sunk to 4 on the question of the occupation of the Red Sea Littoral, on Dec. 5th the commander of the Italian troops at Massowah assumed the civil government without prejudice to the arrangements of the Porte, the Egyptian authorities being sent to Cairo; the Khedive assenting to the arrangement on receiving an annual sum equal to the net revenue derived from Massowah for the past three years. A mission was despatched (Jan. 8th, 1886) to the King of Abyssinia. Jan. 24th. Annual financial statement by Signor Magliani, giving results or estimates for 1885-86, and showing a deficiency of about 20,000,000 frs. Negotiations between the British and Italian Governments are at present (March 31st) under consideration with regard to the final settlement of the occupation of Massowah, but no arrangement has been yet made for its retention by Italy.

J

Jacks, Mr. William, M.P., was b. at Cornhill, Berwickshire, 1841. He was for some time manager of the Sunderland and Seaham Engine Works and Foundry. Returned in the Liberal interest as member for Leith Boroughs (1885).

Jackson, Thomas, executive engineer, d. Jan. 3rd, 1895. He was b. 1808, commenced work at the early age of eight on the Birmingham Canal, and toiled as a day labourer amid the greatest discouragements, till 1827, when he undertook a sub-contract on the canal near Market Drayton. In 1837 his first railway contract was accepted for a part of the Birmingham and Derby Railway. One of his chief contracts was for the renovation of the Caledonian Canal, which had in 1843 become unnavigable. In 1847 he commenced the construction of the gigantic breakwater at Alderney. For nearly twenty-five years he waged a contest with the whole force of the Atlantic; but the breakwater was at last completed. The fortifications for the defence of the harbour of Alderney, and the breakwater at St. Catherine's Bay, Jersey, were also constructed by Mr. Jackson.

Jackson, Mr. William Lawies, M.P., was b. 1840. He is an extensive leather currier and tanner, J.P. for Leeds, and a Director of the Great Northern Railway Company. Returned in the Conservative interest as member for Leeds (1880-85); re-elected 1885.

"**Jacob, Bibliophile.**" See Noms DE PLUME.

Jacoby, Mr. James Alfred, M.P., of Normanton House, Normanton. An extensive lace manufacturer at Nottingham and in Germany; is J.P. for Nottinghamshire, and was formerly Sheriff of Nottingham. Returned in the Liberal interest as member for Mid Derbyshire (1885).

James, Hon. W. H., M.P., of Updown, Sandwich, the eldest son of Lord Northbourne, was b. at Whitehall Place, London, 1846. Educated at St. Peter's College, Radley, and at Christ Church, Oxford, where he graduated B.A. J.P. for Kent. Returned in the Liberal interest as member for Gateshead (1874-85); re-elected 1885.

James, Mr. Charles Herbert, M.P., was b. 1817. Is a solicitor. Returned in the Liberal interest as member for Merthyr Tydvil (1880-85); re-elected 1885.

James, The Rt. Hon. Sir Henry, Q.C., M.P., P.C., son of Mr. Philip Turner James, of Hereford, was b. at Hereford, 1828. Educated at Cheltenham; Lecturer's Prizeman at the Inner Temple (1850-51); called to the bar at the Middle Temple (1852). Nominated to ancient office of "postman" of Court of Exchequer (1867); appointed Q.C. (1869). Was Solicitor-General (1873), in which year he was knighted; Attorney-General (1873-74), re-appointed (1880). Returned in the Liberal interest as member for Taunton (1869-85), Bury (1885).

Jam Manufacture. See FRUIT FARMING.

Janin, M. Jules, permanent secretary of the Academy of Sciences for the section of Physics and Natural History, was b. at Ternes 1813. He commenced his career as one of the masters of the Collège Bourbon, now the Condorcet Lyceum. Professor of Physics at the Polytechnic School, and subsequently (1863) to the Faculty of Sciences at Paris. Entered

the Academy of Sciences in the section of Physics, in which he took the place of M. Pouillet (1868). He published (1858) his lectures on physics at the Polytechnic School—a work which has gone through three editions—and was the author of a large number of valuable articles and papers on scientific subjects, published in the Transactions of different societies. During the last years of his life he devoted his chief attention to electro-magnetism and the electric light. Was appointed permanent secretary in succession to Mons. J. B. Dumas. Died Feb. 12th, 1886, at Paris.

Jansenists. See OLD CATHOLICS.

Japan. A state adjacent to China, from which it is separated by the Eastern Sea and the Straits of Corea, formed of the archipelago of Nippon, which consists of four large islands, Yesso, Hondo, Kiushiu, and Shikoku, and of nearly 4,000 rocky islets. Its area is about 160,000 sq. miles, with a pop. not much under 40,000,000. Its history is almost as ancient as that of China, the present Mikado being the representative of a dynasty which claims to have possessed the throne since B.C. 660; but the legendary period comes down to a time much nearer our own than the well-authenticated annals of the middle kingdom during the last 2000 years. The name of the present Mikado is Mutsu Hito, and he was born in 1852. During the earlier part of his career he passed his existence in the seclusion of the palace of Kioto, to which the Mikados had been kept confined for 250 years by their ambitious ministers, the Shoguns. The Mikados had been indisputably supreme up to the twelfth century. Then the baronial system came into force, and in 1603 the most powerful feudal family, that of the Tokugawa, seized the reins of power, with the designation of Shogun, a title corresponding to vizier or prime minister. The Shogun incurred the jealousy of the other "daimios" or barons, and when he assumed the title of Tycoon for the purpose of concluding treaties with foreign powers, he strengthened the party which had been formed for recalling the Mikado from his place of confinement to assume the charge of the government of his country. The deaths of the old Mikado and Shogun in 1866 simplified the solution of the difficulty, and towards the end of 1867 the new Shogun resigned his title and office to Mutsu Hito in person at Kioto. The question was not settled without a recourse to arms, as the powerful daimio Satsuma provoked hostilities. The result remained undisturbed so far as the Shogun was concerned, but the Mikado was a mere puppet in the hands of Satsuma and the other barons. During nine years (that is, until 1877) affairs went on in this manner; but in that year a fresh struggle for power commenced between the Mikado and the Satsuma family. This war is known as the Satsuma rebellion, in which the Mikado put in the field 65,000 troops against the 40,000 men of the rebels. It has been computed that more than 13,000 men were killed and more than 20,000 wounded before the authority of the Mikado was fully established. The present constitution of Japan therefore dates from 1878, with the death of Saigo, the most capable of all the Satsuma leaders. In 1881

a Sanji-in, or council of state, was formed for the purpose of framing bills and criticising the acts of the executive. Some important changes in the principles and *personnel* of the Government were made by Imperial notification (Dec. 23rd, 1885), abolishing the Council of State, and creating a new Court council and a new cabinet, the new ministers of state occupying more responsible and better defined positions than previously. The chief posts in the new cabinet are held by Counts Ito, the President, and Inouye, the Minister for Foreign Affairs. These changes will prepare the way for the new constitution, to come into force in 1890, when the first Japanese Parliament will be inaugurated.—The trade of Japan is valued at £13,000,000, of which the exports exceed the imports by nearly £2,000,000. Most of the imports come from England, while the United States, China, and France take most of the exports. Yokohama is the principal port of trade. The coal fields of Yesso, which are estimated to be capable of producing an immense quantity of coal, are only partially worked; and it is believed that there still remain unutilised 48,000,000 acres capable of cultivation. The most valuable crop is silk, of which £9,000,000 sterling worth are used at home, and the other £2,000,000 worth are sent abroad. The revenue and expenditure in 1884 each exceeded £15,000,000, whereas the national debt is more than £70,000,000. The army at its full war strength exceeds 100,000 men, and the navy, owing chiefly to the natural aptitude of the Japanese for the sea, has been allowed the first place among Asiatic peoples. The Japanese are undoubtedly a very intelligent and progressive people, but the condition of their finances and a certain restlessness in their disposition, which influences their foreign policy, renders their future more uncertain than their intelligence and the natural wealth of their country would render probable. They have been styled "the French of Asia."

"**Jaques.**" See Noms de PLUME.
Jardine, Sir Robert, M.P., F.R.G.S., was b. 1826. Head of the firm of Jardine, Matheson and Co., merchants in China. Received a baronetcy (1885). Deputy Lieutenant for Dumfriesshire. Returned in the Liberal interest as member for Ashburton (1865-68); Dumfries District (1868-74); Dumfriesshire (1880-85); re-elected 1885.

Jenkins, Mr. David James, M.P., was b. at Exeter 1824, and educated at Exeter and Teignmouth grammar schools. During the Crimean war he commanded a troopship in the Mediterranean, Baltic, and Black Seas. He is partner of the steamship firm of Jenkins and Co., London. Returned in the Liberal interest as member for Penryn and Falmouth (1885).

Jenkins, Sir John Jones, M.P., of Swansea, b. 1834. Deputy-Lieutenant and J.P. for co. Glamorgan; J.P. and Alderman of Swansea, for which borough he has served as Mayor on three occasions, and vice-chairman of the Rhondda and Swansea Bay Railway Company. Sir John Jenkins sat for the Carmarthen District in the Liberal interest (1882-85); re-elected 1885.

Jennings, Mr. Louis John, M.P., b. 1837, is the author of several works, amongst which are "Eighty Years of Republican Government in the United States," "The Croker Papers," etc. Returned as Liberal member for Stockport (1885).

Jersey, Victor Albert George Child Villiers, 7th Earl of (creat. 1697); b. 1845; succeeded his father Oct. 1839; eldest son of the 6th Earl by the eldest dau. of the late Sir Robert Peel, Bart. Was a Lord-in-waiting to the Queen (June 1875 to June 1877).

"**Jerusalem.**" **The.** The Jerusalem Exchange, situate in Cowper's Court, Cornhill, originated in the Old Jerusalem Coffee House, so well known in the time of the "Honourable East India Co." In those days the officers and captains of the "Company" congregated to compare notes of their adventures with the French and Dutch, while merchants and ship-pers endeavoured to gain commercial information from those lately returned from the East. But since the development of telegraphy all this is changed. Still merchants and shippers trading with India, China, and Australia continue to meet every day at 4 p.m. to transact business and arrange freights, without the romance of the old days. It is stated that ships have been loaded in one day by bargains made at the "Jerusalem." Amongst the records to be found at the "Jerusalem" are many things to interest the antiquarian and historian. For instance, memoranda of the *Capture of St. Helena* in 1601; and the account of the eight ships that sailed from Plymouth for that island with Buonaparte in 1815, besides numerous accounts of the engagements of the East Indian Company's fleet with the French and Dutch men-of-war. There are also chronicled the high charges for freight in those days, the instructions given by the Directors of the "Honourable Company" to commanders regarding religious observances on board each ship, and the details of the uniform worn from time to time by the officers, as well as many other matters which would interest the painter as well as the historian.

Jews. The number of Jews in the various countries of Europe at the date of the last census in each (about 1880-1) was as follows:—

Russia	4,008,639
Austro-Hungary	1,643,708
Germany	561,612
Roumania	260,000
Turkey (about)	100,000
Holland	81,693
France	76,000
England	65,000
Italy	40,000
Switzerland	7,373
Scandinavia	6,973
Servia	3,492
Greece	2,052
Peninsula	2,102

EUROPE 6,879,238

Outside Europe no satisfactory enumeration is possible, but it is probable that Asia contains 200,000; Africa, 220,800; the Americas, 250,000; and Australia, 15,000. There are probably eight millions of Jews in existence at the present date (1886). Until very recently Jews were restricted in their rights throughout the world; and those of eastern Europe, Africa, and the East still labour under many disabilities, which it is the object of the "Alliance Israélite" of Paris, and similar societies in Germany, Austria, and England (Anglo-Jewish Association, 100, Sutherland Gardens, W.), to remove. Even in western Europe much of the feeling of ill-will which led to earlier restrictions still remains, and has led

of late years to a recrudescence of mediæval intolerance, which has given rise to the so-called "Jewish Question." This was first raised in Germany, in the "big gooseberry" season of 1875, by some Ultramontane journals anxious to discredit the authors of the May Laws, the National Liberal party, to which most German Jews belong. The writers sought to create ill-will against Jews on two grounds: their commercial prosperity amid the general depression of trade, and their alien race amid the newly-formed passion of Panteutonism. The Jews unwisely made a great stir in answering these attacks, which only served to provoke others, till at last opposition took an organised form in the creation of an Anti-Semitic League which attempted to "boycott" Jews socially. Prince Bismarck had broken with the National Liberals about this time, and he seemed not unwilling that his former allies should be discredited and hampered with the Jewish Question. The German Anti-Semitic movement, which reached its height in the winter of 1880-1, encouraged the enemies of the Jews in other lands, and throughout the year 1881 excesses took place in southern Russia which led in many cases to outrages and loss of life. The Russian Government has always regarded the Jews as "an heritage from Poland," and has accordingly restricted their right of domicile to the former provinces of the Polish kingdom; it accordingly took no effective steps to restrain the peasantry, who were led to think that the property of the Jews had been handed over to them by an ukase of the Czar. At last the attention of Europe was drawn to the persecutions by an attack at Warsaw on Christmas 1881 and the two following days; and a fortnight afterwards two articles appeared in the *Times* giving a history of the persecutions. Great indignation was in consequence spread throughout Europe, and especially in England, where many public meetings were held, and a Mansion House Fund formed, which collected over £100,000. This was chiefly expended in resettling over 20,000 Jews who had lost house and home by sending them to America or restoring them to new homes in Russia. In Austro-Hungary Anti-Semitism, though widely spread, has not led to any great excesses, owing to the friendly attitude of the Government towards the Jews. Much excitement was caused, however, during the year 1883, owing to a revival of the absurd charge of "ritual murder" (originally brought against the early Christians). Some Jews were accused of murdering a girl named Esther Solymosi for ritual purposes in the Pass-over meal, and evidence was manufactured by the police officers of the district. The charge entirely broke down, after a protracted trial which excited European interest. The chief country in which anti-Semitism still raises its head is Roumania, which, though enfranchised by the Treaty of Berlin on condition of freeing its Jews, still evades fulfilment of its treaty obligations. See D. F. Schloss, "Persecution of Jews in Roumania" (Nutt). In Roumania no popular ill-will exists against the Jews, but the Government treats them harshly to gain favour with the Third College of Electors, mainly composed of commercial rivals of the Jews. Here, in England, full emancipation was granted to Jews in 1858, and no ill-feeling exists against them. English Jews number some 65,000, of whom 50,000 live in London, three-quarters of them in the East-end,

chiefly recruited from Russia. They possess a special **Jewish Board of Guardians** (13, Devonshire Square, E.C.), which takes care that no Jew shall depend for aid on the parish; several orphan asylums, Jewish wards in the chief hospitals and other charitable institutions; while the Jews' Free School, Bell Lane, is the largest school in the world, and one of the most successful. There are two Jewish weeklies, of which the more important is *The Jewish Chronicle* (2, Finsbury Square, E.C.). The spiritual wants of Jews are provided for in the East-end by a number of *hebras* or minor congregations, while eleven of the larger synagogues are organised by the United Synagogue (2, Charlotte Street, Portland Place, W.). Ministers for these are mostly trained at Jews' College (Tavistock House, Tavistock Square), which has a very extensive library of works dealing with Jewish subjects. Another library specially noteworthy for Hebrew MSS. is situated at the Beth Hamidrash (St. James' Place, E.C.), where the sittings of the Beth Din, or ecclesiastical tribunal, are held, at which points of Jewish law are decided. Ecclesiastical matters are under the control of the Chief Rabbi, Dr. N. M. Adler, whose son, Dr. H. Adler, now acts as his delegate. His mandates are only binding on the so-called orthodox Jews, while there is a separate synagogue in Berkeley Street for "Reformed" Jews, who pay less reverence to Jewish tradition: there has been a marked *rapprochement* of recent years between these two bodies. There are, besides, some 3000 Spanish and Portuguese Jews (Sephardim) in London, whose ritual slightly differs from that of the more numerous German and Polish Jews (Ashkenazim): their most distinguished member was the late Sir Moses Montefiore (died 1885, aged 100 years and 9 months). As a religious term "Jew" has nowadays the very vaguest connotation, ranging from the superstition of the Chassidim of Russia and Galicia to the advanced agnosticism of the Society of Ethical Culture in New York. No tendency, however, can be discerned among Jews towards the acceptance of the dogmas which differentiate Christianity from Judaism. Jews have some special enactments connected with registration of their marriages, modifications of the Factory Acts to suit their Sabbath, etc. These, and other legislation likely to affect them, are looked after by the **Jewish Board of Deputies** (36, Finsbury Circus). On Jews generally see J. Loeb's article *Juifs*, in St. Martin's "Dictionnaire de Géographie"; J. Davis, *Jews, Modern*, in "Encyclopædia Britannica"; on the literature of the *Judenhetze*, J. Jacobs, "The Jewish Question," 1875-84 (Trübner); on their social and vital statistics, J. Jacobs' "Studies in Jewish Statistics" (*Jewish Chronicle* Office). For dates of Jewish festivals, etc., see the Jewish calendars published every year by Rev. M. H. Myers and by P. Vallentine.

"**Jezreelites**," or the "New and Latter House of Israel." This new sect (whose headquarters are at Gillingham, Kent) was founded by James Jershom Jezreel (d. 1885), his real name being James White. He gave himself out to be the messenger of God, and claimed to have received direct revelations, which are contained in "*The Flying Roll*." They hold that Christ died only for the salvation of those souls who have lived since Moses. He did not die for the salvation of the body;

therefore not for Adam and those before Moses, who paid their penalty by death. For the salvation of the soul the Gospel is sufficient; for the salvation of the body the Law must be added by the 144,000 sealed (Rev. vii. 5-8); therefore every member of the New and Latter House of Israel adds the Law to the Gospel. After the rebellion in heaven it was necessary to prove to the just spirits, and to give those who did not withstand Satan an opportunity to repent. This is accomplished by the spirits receiving human bodies and souls. The just spirits who withstood Satan are now upon this earth, destined for natural immortal bodies, and will constitute the 144,000, twice told, who will receive Christ when He comes to reign 1,000 years. Every member of the House of Jezreel hopes to be one of the immortal number. The Jezreelites who die will be recognised and conversed with by the 144,000 alone. To them a higher state of spiritual bliss is awarded than to Gentile Christians, who have the spirits which did not withstand Satan in heaven, but not being rebellious, they were not cast out. Important buildings are at Gillingham—which is to the Jezreelites what Utah is to the Mormons, and is likely soon to become known as the “Utah of England”—in course of erection on twenty acres of ground, and will cost £100,000. Large sums of money are contributed from all parts of the world. A college where boys and girls are taught, houses and shops, have been purchased; and the community is not only religious, but also trades on a large scale. (See Bishop of Rochester's recent charge to his clergy.)

Jingoes. A term first applied to the extreme Tory party in 1878, when the question of a war with Russia was on the *tapis*, but since frequently and derisively used by the Radicals to denote those who are in favour of any foreign policy that they consider aggressive. The term originated from a music-hall song, the refrain being

“We don't want to fight, but by Jingo! if we do.
We've got the ships, we've got the men, and
got the money too!”

Joachim, Joseph, distinguished violinist, by birth a Hungarian, was b. near Presburg, 1831. Already famous as a youthful prodigy, he went to Leipzig in 1843, to the Conservatoire previously founded by Mendelssohn, who saw his genius and encouraged him. He first came to London in 1844, and has since annually visited us. Herr Joachim has been principal violinist of the Monday and Saturday Popular Concerts from their very commencement. In 1869 he became the head of the newly developed Academy of Music at Berlin. He has written several works for his instrument and the orchestra, the chief being the Hungarian Concerto. The University of Cambridge conferred on him the degree of Mus. Doc., 1877.

Jockey Club and Ring. See RACING.

Johannes II., the present ruler of Abyssinia, was by English influence placed on the throne after the overthrow of King Theodore by Lord Napier at Magdala (1872). The patronage of England has proved most important to him in his successful military operations against the Egyptians. His services were expected to aid the English army against the Soudanese rebels; he remained, however, neutral. He has proved a very intelligent ruler, and seems anxious to find an outlet for commerce on the Red Sea—

the seaport of Massowah appearing to be the goal of his ambition. A mission was sent to King Johannes (Jan. 8th, 1886), from Italy, to secure his co-operation with regard to the Red Sea Littoral.

Johns, Mr. Jasper Wilson, M.P., was b. 1824. He is an architect and engineer. J.P. and Deputy Lieutenant for Merioneth. Returned in the Liberal interest as member for Nuneaton Division, Warwickshire (1885).

Johnston, Mr. William, M.P., was b. 1829. Educated at Trin. Coll., Dublin. Called to the Irish bar (1872). Appointed Inspector of Irish Fisheries (1878). Returned in the Conservative interest as member for Belfast (1868-78); re-elected for South Belfast (1885).

Joicey, Mr. James, M.P., of Newcastle, was b. 1845, at Kep Hill, co. Durham. He is an extensive coal proprietor in the north of England. Returned in the Liberal interest as member for Durham, Chester-le-Street Division (1885).

Joiners The Worshipful Company of. See CITY GUILDS.

Joint Stock Company. For the purposes of commerce a joint stock company is a magnificent partnership; but for the purposes of law a joint stock company is a corporation, whilst a partnership is nothing more than the individuals who join to make it. A company being a corporation can be formed only in one of three ways: (a) by Act of Parliament; (b) by royal letters patent; (c) under the provisions of the Companies Acts, 1862 to 1880. The older methods, being very expensive and dilatory, are now rarely used, and advantage is almost always taken of the Companies Acts. Under these Acts any seven or more persons associated for any lawful purpose may, by subscribing their names to a memorandum of association, and by complying with the provisions as to registration, form an incorporated company, limited or unlimited. The liability of members may be limited either to the amount unpaid upon the shares held by them, or to any such amount as the members by their memorandum of association respectively undertake to contribute to the assets in the event of a winding-up. The memorandum of association must in every instance state the name of the proposed company, the place in which its registered office is to be situated, and its objects. If the company is to be limited, whether by shares or otherwise, the memorandum must give certain additional information. The memorandum must be stamped and signed by each subscriber in the presence of at least one witness. The memorandum of association may, in the case of a company limited by shares, and must in the case of any other company, be accompanied by articles of association containing such regulations for the company as they shall deem expedient. The articles must be printed, stamped, and signed by the subscribers to the memorandum in the presence of at least one witness. The memorandum and the articles are then to be delivered to the registrar of joint stock companies, to be retained and registered by him. A certificate of incorporation given by him is conclusive evidence that the requirements of the Acts have been satisfied. The shares in a company are personal property, can be transferred according to the regulations of the company, and must be numbered. Every company must keep a

register of its members, showing their names, addresses, and occupations, the number of shares held by each, the amount, if any, unpaid upon such shares, the date at which each became a member, and the date at which any one ceases to be a member. No notice of any trust is to be entered upon the register, which is to be kept available gratis for inspection by any member. Every company is bound to have a registered office, and to exhibit its name in legible letters outside each of its places of business. Every limited company must keep a register of all mortgages and charges affecting its property. A general meeting of every company must be held at least once a year. Subject to the provisions of the Companies Act and of the memorandum of association, a company may by special resolution alter all or any of the regulations contained in the articles of association. A special resolution must have been passed by a majority of not less than three-fourths of the members present and entitled to vote, at a general meeting of which notice specifying the intention to propose such resolution has been given, and must have been confirmed by a majority at another general meeting of which due notice has been given, and which must be held not less than a fortnight nor more than a month after the former meeting. A company may be wound up either voluntarily or by order of the High Court. A winding-up under order of the Court is carried out by the official liquidator. All persons liable to contribute to the assets in the event of a winding-up are called contributories, and their liability is determined by the following rules:—(1) No past member who has ceased to be a member for a year or more previous to the commencement of the winding-up is liable to contribute anything. (2) No past member is liable to contribute in respect of any liability incurred after he ceased to be a member. (3) No past member is liable to contribute anything unless it appears to the Court that the present members cannot meet the contributions to which they are liable. (4) In the case of a company limited by shares, no contributory is liable to pay more than the amount unpaid upon the shares in respect of which he is liable. (5) In the case of a company limited by a guarantee, no contributory is liable to pay more than the amount of the undertaking entered into on his behalf in the memorandum of association. (6) Nothing in the Act is to invalidate any provision in any contract whereby the liability of individual members upon such contract is restricted. (7) No sum due to any member of a company by way of dividends, profits, etc., is to be deemed a debt of the company payable to him in case of competition between him and another creditor not a member of the company, but may be taken into account in the final adjustment of the rights of the contributories among themselves. In conclusion, it must be remembered that the above outline of the law relating to joint stock companies is necessarily concise; this branch of the law having attained immense proportions. (See Buckley, "Companies Acts.")

Jones-Parry, Mr. Thomas Duncombe Love, M.P., F.S.A., of Madryn Castle, Pwllheli, Carnarvonshire, was b. 1832. Educated at Rugby and University Coll., Oxford. He is a Deputy Lieutenant and J.P. for Carnarvonshire; High Sheriff of the county (1854). Mr. Jones-Parry represented the county of Carnarvon as Liberal

member (1868-74), Carnarvon Boroughs (1882-85); re-elected 1885.

Jones, Mr. Pryce, M.P., was b. 1834. Returned in the Conservative interest as member for Montgomery Boroughs (1885).

"Jones, T. Percy." See NOMS DE PLUME.

Jordan, Mr. Jeremiah, M.P. Has been twice Chairman of the Enniskillen Town Commissioners. Is a member of the National League. Returned as a Nationalist for West Clare (1885).

"Jorrocks, John." See NOMS DE PLUME.

Jowett, Rev. Professor B., D.D., b. 1817. Became scholar of Balliol College, Oxford (1835), Fellow (1838); appointed Regius Professor of Greek on the recommendation of Lord Palmerston (1855). Was member of a commission for taking into consideration mode of admission by examination to writerships in Civil Service of India. Professor Jowett has written commentaries on some of the Pauline Epistles, and an essay on the Interpretation of Scripture in "Essays and Reviews." In 1870 he was elected Master of Balliol College. He published a translation of the "Dialogues of Plato," 1871. The honorary degree of D.D. was conferred on him by the University of Leyden in 1875.

Juby, Cape. The **North African Company** (British), have recently established themselves here. In his evidence before the Royal Commission on Depression of Trade, Mr. C. M. Kennedy, C.B., Chief of the Commercial Department of the Foreign Office, referring to the enterprise of this Company, expressed the opinion that Her Majesty's Government should grant the directors the same privileges that have been granted by Royal Charter to the North Borneo Company; "or," he added "if it was thought better, I would make it (Cape Juby) a British possession, and part of one of the Settlements on the West Coast of Africa."

Judenhetze. See GERMANY.

Judicial Separation. It was in the power of the ecclesiastical courts, which formerly determined all matrimonial causes, to grant a divorce *à mensâ et thoro*, which released the husband and wife from the duty of cohabitation, but did not enable either of them to marry again. By the "Matrimonial Causes Act, 1857," it was provided that such divorces should no more be granted, but that in every case in which a decree might have been made for a divorce *à mensâ et thoro*, a decree might thenceforwards be made for a judicial separation. A decree for judicial separation may be obtained either by the husband or by the wife on the ground of adultery or cruelty, or desertion without cause for two years or upwards. Cruelty in this sense may be defined as injury to person or to health, or conduct raising a reasonable apprehension of bodily hurt. Even threats to a wife, not accompanied by personal violence, and cruelty to children in the presence of their mother, have been in some cases regarded as cruelty giving ground for a decree. Desertion must be wilful, and against the will of the person who complains of it. From the date of a decree for judicial separation, and so long as the separation continues, the wife is considered as *a femme sole* with respect to all property which she may acquire; and should she again cohabit with her husband, all such property is to be held to her separate use. But this provision has been made superfluous by the Married Women's Property Act, 1882 (*q.v.*). The court has power to order such alimony for the wife, and to make such pro-

vision for the custody, maintenance, and education of the children of the marriage, as it may think proper. Should the decree have been pronounced in the absence of one of the parties, and on the ground of desertion by him or her, the party so absent may present a petition setting out such absence and reasonable ground for the alleged desertion, and may obtain a reversal of the decree. The separation, moreover, may be ended at any moment by the deliberate consent of the parties separated to a renewal of cohabitation.

Jury, Common. The qualification of a common juror is as follows:—He must be between twenty-one and sixty years of age, and he must either have freehold or copyhold estate to the value of £10 a year, or leaseholds on lease for twenty-one years or more to the value of £20, or be assessed to the poor-rate or inhabited house tax at not less than £30 a year in Middlesex and £20 a year in any other county. The churchwardens and overseers in each county annually make out a list of qualified persons, and from these lists the jurors' book for each county is made out. In preparation for the next assizes, or next sessions, a precept is issued to the sheriff ordering him to summon a sufficient number of jurors. He thereupon makes out the panel, a list on parchment containing the names of the jurors summoned; and this panel is printed and kept open to public inspection. The panel contains the names and addresses of not less than forty-eight nor more than seventy-two qualified persons. The cause having been called on in court, the jury is called and sworn. All the names of the jurors on the panel are put into a box and then drawn out; and the names are called in the order of drawing. The first twelve of these who appear are sworn. But before swearing they are liable to challenge; and a challenge may be either to the array, that is, to the whole panel; or to the polls, that is, to individual jurors. The former questions the honesty or impartiality of the sheriff, or at least suggests reasons for doubting either, such as his relationship to one of the parties. The latter may challenge individual jurymen on the ground that they are peers, or that they have not the qualification, or that they may reasonably be suspected of bias, or that they have been convicted of some infamous crime. In criminal causes the prisoner may, without showing any reason, challenge twenty, and in certain cases thirty-five of the panel, and the Crown may similarly challenge as many as, if disallowed, would yet leave enough on the panel to form a jury. Should the panel have been exhausted by challenges, provision has been made for obtaining more persons qualified to serve. Members of parliament, or of the legal, clerical, or medical professions, and certain other classes of persons, may claim exemption when called upon. The twelve jurymen finally obtained are sworn to try the case. The function of a jury cannot be precisely stated in few words; but it may be said to consist in deciding what credit is to be given to evidence. What can be considered evidence (what is relevant to the issue tried), and what legal consequences flow from the facts established, it is for the judge to decide. The verdict of a jury must be unanimous, and if they persist in disagreeing they must be discharged. In cases of felony they are kept together, under supervision,

until they agree or are discharged. A jury called to try a criminal case is sometimes called a petty, as opposed to a grand jury.

Jury, Grand (England). The antiquity of the grand jury is considerable. Like the common jury, it may be traced up to the time of Henry II., if not earlier. But here it is impossible to state more than its present constitution and functions. The sheriff of each county is directed by precept to return to every session of the peace, and to every commission of oyer and terminer and gaol delivery, twenty-four good and loyal men of the county. The qualification of a grand juror at the sessions is the same as that of a petty juror in the trial of civil causes at the assizes. The qualification of a grand juror at the assizes is uncertain. He must be a freeholder, and is usually a gentleman of consideration. The grand jury must consist of at least twelve, and not more than twenty-three, jurymen. Their function is in the formal prosecution of persons accused of crime. They may proceed either by presentment, or by finding an indictment. They proceed by way of presentment when from their own knowledge, and without any indictment laid before them, they take notice of any offence. In this case an indictment must be framed before the person presented can be proceeded against. An indictment is a written criminal accusation. The grand jury, after hearing a charge from the presiding judge of assize, retire to receive indictments. These are preferred in the name of the sovereign, but at the suit of a private prosecutor. As the grand jury have only to inquire whether there is sufficient ground for calling on the party accused to answer the accusation, they hear only the witnesses for the prosecution. If not satisfied, they endorse upon the bill the words "not found," or "not a true bill," and the person indicted is discharged. Another bill against the same person, for the same offence, at the same assizes or sessions, cannot be found by the grand jury; but fresh bills may be preferred to subsequent grand juries. If satisfied of the truth of the accusation, they endorse upon the bill the words "a true bill." Twelve at least of the grand jury must agree to find a true bill, and it is their duty not to find a bill unless the evidence submitted to them is in itself satisfactory. The indictments are then returned into court, and the finding of the grand jury is publicly announced.

Jury, Special. In civil causes either the plaintiff or the defendant may insist upon having the cause tried by a special jury. Every man on the jurors' book (see **JURY, COMMON**) who is legally entitled to be called esquire, or is a banker or merchant, or occupies a house assessed to the poor-rate or inhabited house tax, in a town of 20,000 inhabitants or more at £100 or upwards, and elsewhere at £50 or upwards, or occupies premises other than a farm so rated or assessed at £100 or upwards, or a farm so rated or assessed at £300 or upwards, is qualified to serve as a special juror. When the assizes are approaching, the sheriff is directed to summon a sufficient number of special jurymen, and a panel is prepared in the same way as for common jurymen. In London and Middlesex a special jury may be called, if the judge so order, in a particular way known as striking a special jury. The rules which regulate the special are usually the same as those which regulate the common jury.

K

Kaffirs. The most important of the native races of South Africa. They belong to the great Bantu family, originally coming from the northward, and sweeping in successive waves over the land, dispossessing the Hottentots, driving the Bushmen (*q.v.*), into more and more inaccessible fastnesses, and in turn overrunning and destroying each other. Four main subdivisions may be named, viz., Southern Kaffirs, Zulus, Bechuanas, and Damaras. The Kaffirs—more particularly so called—are likewise subdivided into Galekas, Gaikas, Fingoes, Bomvanas, Pondos, Tembus, etc. They occupy the eastern parts of Cape Colony and the Transkeian Territories, and are spoken of under the heading of KAFFRARIA. The Zulu tribes stretch from Natal northward to the Zambesi, and beyond it. The Bechuanas (Be-tshwana) are numerous, and divided into many tribes. They occupy the Transvaal and Bechuanaland chiefly. The Damaras inhabit the country west of the Kalahari. The Ama-Khosa, or Kaffirs proper, are deemed the highest type, many of them being of an ideal beauty of form. There is a general distinction between the coast tribes and those inhabiting the central plateau of the continent. The former subsist chiefly on animal food, and are energetic and warlike; the latter are agriculturists, subsist on vegetable food, and are mild, inoffensive, and lazy. Europeans generally term all black Africans "Negroes." But the true Negroland is farther north (see SOUDAN). Kaffirs are not negroes, but differ considerably in type, being lighter in colour, less prognathous, and of a taller and slighter build. Polygamy is the general rule among them, a man's riches being estimated by the number of his wives, whom he purchases for so many head of cattle, and who perform most of the necessary manual labour; but to the men belong the care of the cattle, and especially the milking of the cows, and the making of thick sour curd, or butter, in skin bags, which forms a chief article of diet among them, and which would be polluted by the touch of a woman. The women cultivate Indian corn (*mealies*), Kaffir corn, a kind of millet, long water-melons, a peculiar bean, and *imfs*, which is a species of sugar-cane. Men have, however, lately taken to the use of the plough, and thus the condition of the women has become ameliorated under the influence of civilisation. Some tribes own large herds of cattle, and have commenced to farm sheep and goats, those living near Europeans often rivaling them in wealth. In a wild state the Kaffir dresses in a skin "kaross," and adorns himself with various ornaments of shell, ivory, and feathers. His arms are "knob kerries," which are short knobbed sticks used to throw at game, and "assegais," which are spears tipped with iron, or sometimes simply hardened by fire. These are thrown very skilfully, and in warfare are broken off short and used for stabbing the enemy. Some tribes use a shield of bullock-hide, others simply wind the kaross round the left arm. Many now possess firearms. They have long known how to manufacture iron and copper from their ores, and are skilful in weaving baskets, which are close enough in

texture to hold liquid; they make a kind of beer of Kaffir corn and honey, fermented; and grow tobacco and dacca for smoking; they are also passionately fond of snuff. Their huts are formed of long thin poles, stuck in the ground in a circle, bent at the top and tied together with bark; the sides are interlaced with rods, one to four inches apart, also tightly bound together, the whole being thatched very thickly with long grass. Many of these huts, with an inner enclosure for the cattle, form what is called a *kraal* (village); the hut of the chief is larger and better than those of his subjects, and each wife has a hut to herself. Their religious beliefs are uncertain, but they appear to have some notion of a Supreme Being, and are addicted to serpent worship, believing that animal to be the abode of their departed chiefs. They are also firm believers in the power of witches and rain doctors, who possess great influence. Kaffirs make excellent servants, but are so much under the power of their chiefs that they may be called away at any moment. (For some brief historical details see under CAPE COLONY, NATAL, BASUTOLAND, BECHUANALAND, ZULULAND, CETEWAYO, KAFFRARIA. Consult Keith Johnston's "Africa," Rowley's "Africa Unveiled," Mackenzie's "Ten Years North of the Orange River," Statham's "Blacks, Boers, and British," Theal's "South African History," Holub's "Seven Years in South Africa.")

Kaffraria. Properly the country of the Kaffirs (*q.v.*) in eastern South Africa. The name is chiefly applied now to the **Transkeian Territories**, which lie between Basutoland and the sea, and from the Kei river to Natal. A district south-west of the Kei, formerly called British Kaffraria, was annexed to Cape Colony in 1863, and is now known as the two divisions of King William's Town and East London. The various **Transkeian Territories** are now grouped into three chief magistracies: **Grigoland East**, comprising Nomansland, Gatlberg, and St. John's Territory, with eight subordinate magistrates; **Tembuland**, comprising Tembuland Proper, Bomvanaland, Emigrant Tembuland, and West Pondoland, with ten subordinate magistrates; **Transkei**, comprising Fingoland, the Idutwya Reserve, and Galekaland, with six subordinate magistrates. These states, or tribal territories, have come under the rule of Cape Colony at various periods since 1875. West Pondoland is the most independent. The whole country is well watered and wooded, with an excellent climate and fertile soil, forming a magnificent agricultural country; but the rivers are not navigable, and the coast is rocky and dangerous. The St. John's river is navigable for vessels of small draught at the mouth, and might eventually be made a good port; the scenery of this part, known as the Gates of St. John's, is magnificent, and the country inland, leading up to the Drakensberg mountains, is one of the finest in South Africa. The native inhabitants are Amapondos. Adjoining Pondoland on the west are **Tembuland** and **Bomvanaland**, occupied by the Tembus or Tambookies and the Amabomvani. South and west of these districts is the country inhabited by the Gaikas and Galekas

on the coast, and by the Fingoes inland. The **Galekas** are the most warlike of the Kaffirs bordering upon the Cape Colony, and under their chief **Kreli** invaded British territory in 1877. They were defeated, Kreli deposed, and their country annexed in that year. The **Fingoes**, inhabiting Fingoland, were formerly reduced to slavery by the Galekas and other tribes, who gave them the name Fingo (dog). Released from their servile condition by the British, they were in 1858 awarded a portion of the territory of their former masters; and under British jurisdiction have thriven greatly, and have proved themselves capable of considerable progress in civilisation. They are skilful agriculturists, owning many ploughs, horses, large flocks of sheep and goats, and vast herds of cattle. They have amongst them a great number of missionaries, whom they support freely; and many hundreds hire themselves in the Colony as labourers, whilst the country occupied by them serves as a barrier against the warlike Galekas. **Griqualand East**, of which Nomansland forms a portion, is occupied in part by Griquas, or "Baastards"—a mixed race, half Dutch and half Hottentot—and partly by Basutos. The country is flourishing, much wheat being grown by the Griquas, and large herds of cattle being kept by the Basutos. The whole of the country included in these Transkeian territories, embracing 12,065 square miles, is good agricultural and pastoral land, and the sea-coast appears to be suitable for the cultivation of coffee, sugar, cotton, etc. Besides the Kei and the Umzimvubu, the country is watered by the Bashee, the Umtata, the Umtafuna, and the Umzimkulu, taking their rise in the Quathlamba and Stormberg ranges, which form the north-west boundary, and rise to an elevation of 9,657 feet. Copper and coal are the chief minerals. **Griqualand East**, pop., 78,000; revenue, £25,000; expenditure, £19,000. **Transkei**, pop., 83,000; revenue, £12,000; expenditure, £14,000. **Tembuland**, pop. 98,000; revenue, £36,000; expenditure, £19,000.

Kalnoky, Count Gustav Siegmund, an Austrian statesman, b. December 29th, 1832, at Lettowitz in Moravia. After serving for a few years in the army, he entered the diplomatic service (1850). From 1860 to 1870 he was Councillor of Legation at the Austrian Embassy in London. In 1874 he went as Minister to Copenhagen, whence he was transferred (1880) as ambassador to St. Petersburg. Thence he was recalled in 1881 to assume the important office of the joint Austro-Hungarian Minister of Foreign Affairs, in succession to Baron Haymerle—a post which Count Kalnoky has since filled with much ability, pursuing the peace policy which is the foundation of the alliance with Germany.

Kanghi. See CHINA.

Karageorgevitch, Alexander, son of the celebrated "Czerny," or "Kara" ('Black') George, from his swarthy complexion, was b. 1806; passed his youth in Wallachia; returned to Servia in 1839; gained the friendly sympathies of the then ruler, Michel Obrenovitch, who appointed him his aide-de-camp; and on the latter's deposition, in 1842, was proclaimed by the National Assembly Prince of Servia. The Ottoman Government, which entertained a strong feeling of hostility to the Obrenovitch family, at once recognised Alexander Karageorgevitch; but Russia took

up an exactly opposite attitude, and protested against his accession to power, and in consequence a new election took place, which put him definitively in possession of supreme power. He applied himself to the development of the industrial resources and commerce, together with all the material improvements required by the country, at the same time giving his attention to the amelioration of its system of public education, both civil and military. On the breaking out of the Crimean war, in 1853, he refused to take up arms against Turkey, although pressed hard by the National party in Servia to do so; and the Sultan Abdul-Medjid, in recognition of his loyalty, confirmed by a firman all the privileges previously accorded to Servia. These, finally confirmed by a hatt-i-scheriff of Sultan Mahmoud in 1850, erected Servia into a principality tributary to and under the suzerainty of the Ottoman Government, with an administration totally independent. By the treaty of Paris (1856) the great Powers added their guarantee of the national and independent integrity of Servia. But the old Prince Milosch, of the Obrenovitch family, who had been in exile since 1842, taking advantage of a certain discontent which prevailed in Servia owing to the attitude taken up by Alexander Karageorgevitch towards Turkey, incited a conspiracy, headed by the president of the senate, Stefanovitch, along with other notable persons. Having been discovered, very severe measures were taken against the principal persons engaged in the conspiracy, and the feeling of the nation was prejudiced against Karageorgevitch, resulting in a series of conflicts between him and the representative chamber (or "Skuptchina"), finally terminating in his forced abdication, proclaimed Sept. 22nd, 1858. Alexander Karageorgevitch then retired to Austria with his family, and the Milosch Obrenovitch was restored to power. His son and successor (Michel Obrenovitch) having been assassinated in 1868, at the instigation, as alleged by the assassins, of Alexander Karageorgevitch, the chambers (senate and skuptchina), in apparent concurrence with a feeling of popular indignation, renewed the decree of deposition pronounced against Karageorgevitch ten years before, and raised to the supreme power the young prince Milan (see MILAN), nephew of Prince Michel who was assassinated,—thus restoring the Obrenovitch family to power, and excluding Karageorgevitch and family therefrom. In 1876 he issued a manifesto to the Servians during the war against Turkey, which produced no result.

Karnak, Temple of. See BIBLICAL ARCHÆOLOGY.

Karoo. A Hottentot-Dutch word signifying "desert," applied to elevated barren plateaux in Cape Colony. An aromatic heath-like plant abounding on these plains is also called "karroo." The Great Karroo extends between the coast range and the main range of Cape Colony. It is 100 miles across, and covers an area as large as Ireland. Its elevation is 3,000 to 4,000 feet above sea-level. There may generally be reckoned to be one year of drought to two years of good water supply. For the last fifty years the "Karoo" has been acknowledged to contain the best pasturage for sheep and goats, and later also for Angora goats and ostriches; and, in consequence, immense tracts are now occupied as farms, which are watered not only

by permanent springs, but by large dams or reservoirs, constructed by the farmers for the purpose of storing the superabundance of rain which in the two good years falls during the summer thunderstorms. It has also lately been discovered that these plains have underlying currents of water nearly everywhere; and during a recent drought many farmers sank wells, and by means of windmills succeeded in pumping up a fair supply of water for irrigation as well as for the stock. Both the soil of the "Karoo" and the water are strongly impregnated with salt; but many kinds of cereals, fruits and vegetables can be grown, and are successfully cultivated. In various spots in the "Karoo" mineral springs similar to those at Bath and Harrogate are discovered.

Kars. A famous Turkish fortress in Asia, now in the possession of Russia. Situated on the frontier of the two countries, it has been repeatedly besieged. In 1854 it was gallantly, but unsuccessfully, defended by Sir Fenwick Williams. In 1877 the fresh struggle with Russia found the fortress in an almost perfect condition of defence, immense sums having been lavished on new forts and artillery. Using it as a base the Turks drove back the Russians to the frontier, and the first part of the campaign ended badly for the latter. But the Turks failed to follow up the pursuit to Tiflis, and the Russians returning first shattered Mukhtar Pasha's army, and then, besieging Kars, carried it by storm (Nov. 1878), after a month's operations. The fortress was practically intact when taken, and although the Russians claimed to have carried the place purely by a night surprise, there has always been a belief that they were aided by treachery on the part of some of the Turkish officers. After the war the Russians connected it with Batoum and Tiflis by military roads, and enlarged the fortifications, so that Trans-Caucasia, hitherto slightly protected on the side of Armenia, is now able to defend itself against a very powerful European army. Kars was valued by England because it was the key of Armenia, and its surrender was only agreed to by the Earl of Beaconsfield in 1878, because the Russians refused to retire unless driven from it, and he did not deem it advisable to embark on a great war for a place which would have been difficult to take, and whose loss was not immediately felt by England.

Keane, John Manley Arbuthnot, 3rd Baron (creat. 1839); b. 1816; succeeded his brother 1882. The first peer distinguished himself in the Peninsular war, but received his peerage immediately after the transactions in Afghanistan which led to the first capture of Ghuznee (1839).

"**Keene, Charles.**" See NOMS DE PLUME.

Keen Lung. See CHINA.

Kelly. See FENIANS.

Kelly, Mr. Bernard, M.P., is Secretary of the local National League. Returned as a Nationalist for South Donegal (1885).

Kempton Park Grand Prize. See RACING.

Kenlis, Baron. See HEADFORT, MARQUIS OF.

Kenmare, Valentine Augustus Browne, P.C., 4th Earl of (creat. 1800); sits in the House of Lords as Baron Kenmare; b. 1825; succeeded his father 1872. Was Controller of the Queen's Household July 1856 to Feb. 1858; twice Vice-Chamberlain (1859-66, and 1868-72); Lord Chamberlain (1880-85); re-appointed 1886. The first and second Viscounts Kenmare forfeited

their estates for their adherence to James II.; the attainder was never reversed, and the honours now in existence were conferred on the present peer's grandfather.

Kennaway, Sir John Henry, Bart., M.P., the eldest son of Sir John Kennaway, M.A.; was b. 1837. Educated at Harrow and at Balliol College, Oxford, where he graduated first class in law and history. He was called to the bar at the Inner Temple (1864). Sir J. Kennaway is J.P. and Deputy Lieutenant for Devonshire, and major of the 3rd Volunteer Battalion Devonshire Regiment. Entered parliament in the Conservative interest as member for East Devonshire (1870-85); re-elected 1885.

Kenny, Mr. Courtney Stanhope, M.P., was b. 1847. Educated at Heath Gram. Sch. and Downing Coll., Cambridge. He is a barrister-at-law, Law Lecturer of Trin. Coll., Cambridge, and Fellow of Downing Coll. Returned in the Liberal interest as member for Barnsley Division, W. Riding, Yorkshire (1885).

Kenny, Dr. Joseph Edward, M.P. Educated in Dublin. Licentiate of the Royal College of Physicians and of Surgeons, Edinburgh (1870); L.A.H. Dublin (1868) from the Catholic Univ.; Fellow of the Academy of Medicine, Ireland. Formerly Visiting Surgeon to the North Dublin Union Hospital, and Physician to the North Dublin Union Smallpox Hospital. Returned as a Nationalist for South Cork (1885).

Kenny, Mr. Matthew James, M.P., was b. 1861. Educated at the Queen's Univ., Ireland. Late Chairman of the Council of the united branches of the late Land League in Manchester. Returned as a Nationalist for Ennis (1882-85); Mid Tyrone (1885).

Kenrick, Mr. William, M.P., was b. 1831. Gold Medallist for Chemistry at Univ. Coll., London. Elected Alderman and Mayor of Birmingham (1877); Chairman of the General Committee of the National Liberal Federation (1872). Returned in the Liberal interest as member for North Birmingham (1885).

Kensington, William Edwardes, P.C., 1st Baron (creat. 1886), was b. 1835. Educated at Eton. Captain and lieutenant-col. Coldstream Guards (1867); Vice-Lieutenant of Pembroke-shire (1862); Lieutenant (1872). Has held the following official appointments:—Groom-in-waiting (1873-74); Controller of the Household (1880); Second Liberal Whip (Session 1880-85). Returned in the Liberal interest as member for Haverfordwest (1868-85). Contested unsuccessfully Hornsey Division at the late election. Lord-in-waiting (Feb. 1886).

Kenry, Baron. See DUNRAVEN.

Kenyon, Hon. George Thomas, M.P., of Kimmel Park, Abergele, North Wales; the eldest surviving son of the third Baron Kenyon; was b. 1840. Educated at Harrow, and Christ Church, Oxford. Called to the bar at the Middle Temple (1869). He is a J.P. for Flintshire and Shropshire, and held a commission in the North Shropshire Yeomanry (1873-78). Returned in the Conservative interest as member for Denbigh District (1885).

Kenyon, Lloyd Kenyon, 4th Baron (creat. 1788); b. 1864; succeeded his grandfather 1869. The first peer was a distinguished judge.

Ker, Captain Richard William Blackwood, M.P., was b. 1850. Formerly captain in the 1st Royal Dragoons. Is J.P. for county Down; High Sheriff (1880). Returned in the Conservative interest as member for East Down (1885).

Kerr, Baron. See **LOTHIAN**.

Kesteven, John Henry Trollope, 2nd Baron; (creat. 1868); b. 1851; succeeded his father 1874.

Kettle, Sir Rupert. See **MINING**.

Key Relationship. See **TONIC SOL-FA**.

Kharkoff. A rapidly developing Russian town (population 60,000), situated about 460 miles S. of Moscow. The growth of the iron and coal fields of S.E. Russia is producing a favourable effect upon its industries, yearly increasing in number and importance. The University, containing 600 centres, was the most active Nihilist centre during the troubles culminating in the death of the late Czar. On this account its privileges have been curtailed, and education is carried on in a very unsatisfactory manner.

Kherson. A Russian town of 50,000 inhabitants on the Dnieper, about forty miles from Nicolaïeff, the growth of which as a dockyard has dwarfed the previous naval importance of Kherson. It is best known as the resting-place of Howard the philanthropist, to whom a monument is erected.

Khojent. A town (pop. 30,000) in Turkestan, alternately ruled by Khokand and Bokhara, which General Romanovsky captured (June 5th, 1866). Formerly of considerable commercial importance, it has decayed somewhat since. It was the scene of a serious outbreak in 1875, when Khokand revolted against Russia.

Khokand. A Mussulman province in Central Asia, the power of which was shattered by General Tchernayeff in 1864-65. A portion was left independent until 1875, when an outbreak caused the Russians to overrun and annex it. This campaign was the hardest the Russians had had in Turkestan in point of national resistance, but the people have since become reconciled to their rule. The city of Khokand (pop. 60,000) ranks next in commercial importance and size to Tashkent and Bokhara.

Khorassan ("The country of the Sun"). One of the richest provinces of Persia, situated to the east of the Caspian Sea. It consists of 140,000 square miles, comprising nearly a quarter of Persia: population 860,000. The country is wonderfully fertile, except where the great desert of Persia encroaches upon it, and its prosperity may be expected to increase now that the Turcoman raids all the way along the north are suspended, in spite of the tyranny and imbecility of the rulers. To all appearance Khorassan is destined to be early annexed by Russia. The Russian outposts stretch for nearly 1000 miles round the north, from the mouth of the Atrek to the Zulfikar Pass. On the south the great desert separates it from the rest of Persia. Communication with Teheran is only maintained by a couple of roads through the narrow cultivated gullet alongside the Caspian. Thus, while Russia possesses 1000 miles round Khorassan, Persia possesses only 80 miles, from Astrabad to Shahron; and it would be easy at any time for Russia, by simply landing 3000 or 4000 troops in Astrabad Bay, where she already has a naval station, to cut off the whole province from Persia. Teheran also is 568 miles from Meshed, the capital of Khorassan, while the Russian outposts at Pulikhatun, on the Perso-Afghan frontier, are within seventy miles, and will soon have a railway to increase their power and influence. On this account a Khorassan Question is rapidly ripening, and what at the early part of the present century was the "paradise of

the poets," promises to be at the close the sport of politicians. Early in 1886 an exploring expedition under the direction of Dr Radde and other eminent scientists, and the auspices of the Emperor of Russia, started from Tiflis to investigate the natural history of Khorassan.

Khorasabad. See **ASSYRIOLOGY**.

Kieselguhr. See **DYNAMITE**.

Kilcoursie, Viscount, P.C., M.P., eldest son of the Earl of Cavan, was b. at Eaglehurst, Hants, 1839. He is Deputy Lieutenant for Somerset. Returned in the Liberal interest as member for South Somersetshire (1885). Holds the office in the present Gladstone administration of Vice-Chamberlain of the Household (1886).

Kilima-Njaro. A mountain mass in East Africa with snow-clad peaks. It is situated about 100 miles inland from the port of Mombasa, on the Suaheli coast, north of Zanzibar Island. The district has been lately explored. (See a paper by H. H. Johnston, in "Proceedings of the Royal Geographical Society" for March 1885.) Its climate is said to be perfectly healthy for Europeans, with various plateaux and valleys suitable for the cultivation of coffee, cinchona, etc. The natives are not untractable, and the country is excessively beautiful—a sort of East African Switzerland. Reports have been current that Germany desired to annex Kilima-Njaro (see **GERMAN COLONISATION**), and a still later rumour is that the British Government had instructed our consul at Zanzibar to take steps for placing the region under British protection. Whether formally annexed by either power or not, Kilima-Njaro is likely to come into notice as a place for independent European settlement.

Kilmarnock Treaty. A phrase which came into use immediately after the release of Mr. Parnell and the other Irish members who had been imprisoned under the Coercion Act of 1880. Kilmarnock is the name of the prison from which the suspects were released. The existence of an understanding or arrangement between Mr. Parnell and the Gladstone ministry was a question of much controversy and of frequent and bitter debate in parliament. The foundation for the charge was that shortly before his release Mr. Parnell wrote a letter which stated that if a bill were brought in to deal with several questions left open by the Land Act of 1881—an interpretation of the Healy improvements clause more favourable to the tenant, the inclusion of leaseholders in the benefits of the Act, larger facilities to tenants for the purchase of their holdings, and above all a bill to enable the poorer tenants to settle the large arrears bequeathed from previous years of distress—the state of crime and disturbance in Ireland would be brought to an end. Immediately after this Mr. Gladstone announced, and subsequently carried, a bill settling the Arrears question; and hence he was said to have borrowed Mr. Parnell's policy, to have for this reason agreed to his release, and so to have made a "Kilmarnock Treaty."

Kilmarnock, Baron. See **ERROLL**.

Kilmorey, Francis Charles Needham, 3rd Earl of (creat. 1822); b. 1842; succeeded his grandfather 1880. Irish representative peer as Viscount Newry. Was M.P. for Newry (1871-74).

Kimber, Mr. Henry, M.P., of Lansdowne Lodge, West Hill, Putney, was b. 1834. He

is a solicitor. Gained the first prize of the Incorporated Law Society, and 2nd class Honors in the Legal Examination of Univ. Coll. Returned in the Conservative interest as member for Wandsworth (1885).

Kimberley. See SOUTH AUSTRALIA.

Kimberley, John Wodehouse, P.C., 1st Earl of (creat. 1866); b. 1826; succeeded his grandfather in the barony of Wodehouse (1846). Was Under-Secretary for Foreign Affairs (Dec. 1852 to April 1856); Envoy Extraordinary and Minister Plenipotentiary to Russia (May 1856 to March 1858); again Under-Secretary for Foreign Affairs (June 1859 to July 1861); was Lord Privy Seal (Dec. 1868 to July 1870); and Secretary of State for the Colonies (from the last date to Feb. 1874, and May 1880 to Dec. 1882); Secretary of State for India (Dec. 1882 to June 1885); Chancellor of the Duchy of Lancaster for a short time (1882); sent on a special mission to Copenhagen (Dec. 1863); Lord Lieutenant of Ireland (Oct. 1864 to June 1866), when he was created an earl. Holds office as Secretary of State for India in the present Gladstone cabinet (1886).

Kinetic Energy. See ENERGY, LAWS OF.

King, Mr. Henry Seymour, M.P., was b. 1852. Educated at Charterhouse School and at Balliol Coll., Oxford. He is head of the banking firm of Henry S. King & Co., 65, Cornhill. Returned in the Conservative interest as member for Central Division of Hull (1885).

King, The Hon. Peter John Locke, formerly M.P. for East Surrey, d. Nov. 13th, 1885. He was b. in January 1811. He entered the House of Commons, in the Liberal interest, as one of the members for the Eastern Division of Surrey (1847), and retained his seat till the general election in 1874, when he was defeated. He brought in several bills in favour of an extension of the suffrage.

King-Harman, Colonel Edward Robert, M.P., of Rockingham, Boyle, co. Roscommon, and Newcastle, Ballymahon, co. Longford, grandson of the first Viscount Lorton, was b. 1838. Educated at Eton. Was lieutenant 60th Rifles and captain Royal Longford Militia. He is Lord Lieutenant and Custos Rotulorum of co. Roscommon, hon. colonel of the Roscommon Militia, and Deputy Lieutenant and J.P. for counties Sligo, Longford, and Westmeath. Returned in the Conservative interest as member for Sligo (1877-80); Dublin County (1880-85); Isle of Thanet (1885).

King's Advocate. See ADVOCATE, LORD.

Kinnaird, Arthur Fitzgerald Kinnaird, 10th Baron (creat. 1682); sits in the House of Lords as Baron Kinnaird of Prossie; b. 1814; succeeded to title 1878. The first peer was ennobled for his loyalty to Charles II.

Kinnear, Mr. John Boyd, M.P. Member of the Scotch bar (1850). Legal secretary to Lord Moncreiff when Lord Advocate. Returned in the Liberal interest as member for East Fifeshire (1885).

Kinnoul, George Hay, 11th Earl of (creat. 1633); sits in the House of Lords as Baron Hay; b. 1827; succeeded his father 1866. The first peer was in high favour with James I. of England; the second and third earls were active Royalists during the civil wars. The first earl's cousin was raised to the peerage as first Earl of Carlisle. He obtained a grant from Charles I. of the Island of Barbados; his titles expired in his son, while the island devolved upon the

third Earl of Kinnoul, who disposed of it to Charles II. (1661).

Kintore, Algernon Hawkins Keith-Falconer, 9th Earl of (creat. 1677); holds his seat by the title of Lord Kintore; b. 1852; succeeded his father 1880. The first Earl was appointed Hereditary Knight Marischal of Scotland for his exertions in preventing the regalia of Scotland from falling into the hands of Cromwell.

Kirghiz. A nomad people dwelling chiefly in the steppes and deserts stretching from the northern part of the Caspian Sea to the Chinese Empire. Russia completed her conquest over them after the Crimean war, with the exception of a few settled in Chinese territory and near the Pamir. The majority, occupying the borderlands of the Aralo-Caspian basin, suffered dreadfully during the severe winters of 1879 and 1880, which thinned their numbers, and by the destruction of their herds shattered their prosperity. The expansion of Russia is bringing them yearly more and more within civilised influence, and by degrees their territories are being placed under the direct administration of Russian officials. In 1884 the Tourgair region, into which Russian settlers are pouring, was formed into a province. The Kirghiz are hospitable, and tolerably orderly, and appear to be quite satisfied with Russian rule. They are not heavily taxed, are not liable to conscription, and Russia has carried her toleration so far as to assist the **Mollahs** of Central Asia to convert them from Paganism to Mohammedanism.

Kitching, Mr. A. G., M.P., of Rydal Lodge, Clacton-on-Sea. He is a member of the Stock Exchange. Returned in the Liberal interest as member for East Essex, Maldon Div. (1885).

Kleist-Retzow, Herr von. See GERMAN POLITICAL PARTIES.

Knatchbull-Hugessen, Mr. Herbert Thomas, M.P., of Lynsted, Sittingbourne, Kent, the son of the late Rt. Hon. Sir E. Knatchbull, M.P., of Mersham Hatch, Ashford, Kent, and brother of Lord Brabourne, was b. 1835. Educated at Eton and Trin. Coll., Oxford. Returned in the Conservative interest as member for North-East Kent (1885).

Knightley, Sir Rainald, M.P., of Fawsley Park, Daventry. Educated at Eton. Deputy Lieutenant and J.P. for Northamptonshire. Returned in the Conservative interest as member for South Northamptonshire (1852-85); re-elected (1885).

"Knight Service." See LAND QUESTION, THE.

"Knights' Fees." See ARMY.

"Knocks-out." A combination of dealers who frequent auction sales and agree amongst themselves not to bid against one another, but to call into question the genuineness or quality of the goods offered for sale, and in similar ways to disparage them in the eyes of the private buyer, and by this means to secure the purchase at a low price. The party then hold an auction sale of the goods amongst themselves, the highest bidder to be the buyer, and the profit in the transaction to be shared alike between all members of the circle. These cliques are the most common in the furniture and picture trades.

Knoodt, Prof. See OLD CATHOLICS.

"Knowledge," a monthly scientific magazine (6d.), under the editorship of **Mr. R. A. Proctor, B.A.**, was originally started as a weekly record of scientific progress. In 1885

it was changed to magazine form. *Knowledge* treats of the newest and most advanced scientific theories and researches, and gives especial prominence to astronomy.

Knowles, Mr. James, F.R.I.A., was b. 1831. Educated at Univ. Coll., Lond. From early years he pursued literature, and contributed articles to various magazines; and in 1860 he published the "Story of King Arthur." Succeeded Dean Alford (1870) as editor of the *Contemporary Review* (q.v.), and on the establishment of the *Nineteenth Century* (q.v.) became its editor (1877). In addition to his literary work, Mr. Knowles has acquired reputation as an architect: Aldworth, the Surrey residence of Lord Tennyson, Kensington House, the Thatched House Club, and several churches having been erected from his designs.

Koh-1-noor Gas. See ILLUMINANTS.

Komaroff, Lieut.-General. An experienced Russian diplomatist and soldier, who was brought prominently under public notice in consequence of his holding the command of the Russian forces on the occasion of their conflict with the Afghans at Penjdeh (March 30th, 1885), and whose official version of the affair, exhibiting grave discrepancies with that of Sir P. Lumsden, the British envoy, gave rise to the late critical dispute between the English and Russian Governments. He is Lieutenant-Governor of the Trans-Caspian Provinces—an appointment conferred in acknowledgment of his services in connection with the annexation of Merv when Governor of Askabad. General Komaroff, who is fifty years of age, has seen much military and political service. Was chief over the national military administration in the Caucasus, distinguished himself in the Russo-Turkish war of 1877-78, in which he was wounded, took part in the assault of Kars, and at the close of the war was appointed governor of the town and port of Batoum, succeeding to the command of the Trans-Caspian army, his present post. He is at present (March 27th, 1886) at Merv, with the Afghan Boundary Commission.

Kordofan. See SOUDAN.

Koumys, or Kumiss, has long been used as a beverage and for medicinal purposes by the Kirghiz, Kalmucks, Turkomans, Nogays, and other nomadic tribes of the steppes of Russia and Tartary. It is there prepared from mare's milk. The process consists in causing fermentation by the addition of yeast to fresh milk, and stirring occasionally for about twelve hours; it is then corked up for several days to develop the alcoholic fermentation. If this is carried on too long, the amount of alcohol is so increased that the koumys becomes an intoxicant; but if properly prepared, it promotes digestion and nutrition, and is therefore specially useful in wasting diseases, such as consumption, chronic dyspepsia, and diarrhœa, anæmia, nervous exhaustion, etc. Dr. Carrick, of St. Petersburg, has strenuously advocated its use (*Edinburgh Medical Journal*, xxvii. 167). For special purposes the whey only, or the milk diluted, is used for fermentation. Koumys is now regularly made from cow's milk (which is free from the disagreeable odour of mare's milk) by the Aylesbury Dairy Company.

Kouyunjik. See ASSYRIOLOGY.

Krakatoa, an uninhabited volcanic island in the Straits of Sunda, between Sumatra and Java. After being dormant for two centuries, it showed signs of feeble activity on May 20th, 1883; and on August 26th it burst into a state

of violent eruption. During this paroxysm a large part of Krakatoa was actually blown away, and the physical features of the island entirely altered. An immense sea-wave swept over the shores of the neighbouring islands destroying numerous villages and more than 35,000 inhabitants. The violent oscillations of the surface of the waters were recorded by tide gauges at distant stations; but the atmospheric disturbances were even more marked, and barometric observations showed that aerial waves, travelling at the rate of 700 miles per hour, passed three or four times round the entire globe. Magnetic needles were violently agitated, and great disturbance of electric equilibrium accompanied the eruption. Vast quantities of pumice were ejected, and indeed the navigation of the strait was impeded by the floating masses; while the finer ash was emitted in such dense clouds as to render the air impenetrably dark for two days. The terrific detonations produced by the eruption were heard at a distance of 1,000 miles from Krakatoa. Soon after the eruption a succession of brilliant sunsets and other atmospheric phenomena were observed in all parts of the world; and it was suggested that these effects were connected with the presence of extremely fine volcanic dust floating in the higher regions of the atmosphere. The curious effect of a "green sun" was supposed by some meteorologists to be due to the presence of an unusual quantity of vapour in the air, consequent on the discharge of vast volumes of steam from Krakatoa. Somewhat similar optical effects, especially fine after-glows, have been recorded after other volcanic eruptions. On the other hand, it is stated that in Australia and elsewhere the atmospheric effects were witnessed prior to the eruption of Krakatoa, and could have no connection whatever with volcanic activity. A committee of the Royal Society was appointed to collect information respecting Krakatoa, but their report has not yet appeared. The first part of the official Dutch report has however been recently issued. (See "Krakatoa," by R. D. Verbeek: Batavia, 1885.)

Krapotkin, Prince Peter Alexeevitch, b. at Moscow, 1842. Studied at the College of Pages. Aide-de-camp to the Military Governor of Transcaucasia. Attaché for Cossack Affairs to the Governor-General of Eastern Siberia (1863-67), in which capacity he made numerous journeys in Siberia and Manchuria, accounts of which have been published in the "Memoirs of the Russian and Siberian Geographical Societies." Returning (1867) to St. Petersburg, he studied at the St. Petersburg University, abandoned the State's service, and published the first part of an important work on glacial deposits. Visited Belgium (1872), and there made acquaintance with the *International Working Men's Association*, joining its most advanced Anarchist section. Returning to Russia, he became a member of the widely spread Socialist organisation of the *Tchaykovskys*. Arrested (1874), he escaped from the Military Hospital (1876), and went to England. Founded at Geneva (1879) the Anarchist paper *Le Révolte*. Expelled from Switzerland (1881), he stayed first at Thonon, and then went to reside in England, where he made an agitation against the Russian Government, both in the press (*Newcastle Chronicle*, *Fortnightly Review*, and *Nineteenth Century*), and by a series of lectures at Newcastle and in Scotland. Return-

ing to Thonon, he was arrested (1882). Condemned by the Police Correctionnelle at Lyons to five years' imprisonment for participation in the International Working Men's Association (1883). Liberated January 15th, 1886, by a decree of the President of the French Republic. His Anarchist papers, contributed to the *Revolte*, have been collected by his friend Elizée Reclus, and published in a separate volume under the title "Paroles d'un Révolté" (October 1885).

Krell. See KAFFRARIA.

Kreoehyle. A liquid preparation of English beef, patented by Messrs. Barff and Wire, and manufactured at Leytonstone, E., by gentle heat and pressure. Contains the whole of the soluble albumen of meat in an uncoagulated condition, and in such a form as to render it capable of being digested without any aid from the digestive organs of the body. An experiment was tried by the Rev. R. V. Vaughan, of Liverpool, and it was found that between 90 and 92 per cent. of the albumen contained in kreoehyle diffused through the intestine of a turkey in 48 hours, at a temperature of 60° Fah. It is both a food and stimulant; its nutritive properties being mainly derived from the soluble albumen, and its stimulative properties from the "meat extractives." It is free from all traces of alcohol.

Kriegspiel, or War Game. This game was invented by the officers of the Prussian army, some few years before the campaign against Austria in 1866. Its study is believed to have done much towards perfecting the regimental and lower field officers in their duties, and conducted in no slight degree to the successes of the war of 1866, and of that against France in 1870-71. The game is played upon a map which accurately delineates the theatre of war. Troops are represented by movable pieces, of which one stands for a battalion of infantry, another for a squadron of cavalry, and another for a fraction of a battery of artillery. The rate at which the troops can be moved is regulated by the rate at which troops march in actual war. The players are usually two upon each side, who consult together. The time allowed for each move is determined by casting dice, and the player can move his troops as far on the map as real troops could progress on the ground in the exact number of minutes given by the fall of the dice. All movements which in real war would be concealed by the contours of the ground from the enemy, are concealed by a sheet from the opposite players. The game is, in fact, an exact miniature of tactical operations, and has been proved of great value in the education of the officers of the German army. It has been adopted to a certain extent in the British service, and some interesting games have been played at the Horse Guards by picked officers on either side.

Krupp, Friedrich. See CHINESE LOAN, NEW GREAT.

Kublai Khan. See CHINA.

Kuldja. See CHINA.

Kumassi. See WEST AFRICAN BRITISH POSSESSIONS.

Kuper, Admiral Sir Augustus Leopold, K.C.B., d. Nov. 10th, 1885. He was b. in 1809, and entered the navy in his fourteenth year. He passed through the usual grades in virtue of valiant services till he was promoted to be an admiral (in October 1872). As commander of the *Alligator*, he took part in the capture of Canton and Amoy, and was present at the attack on the Bogue Forts and on the Chinese positions below Whampoa Reach (in 1840-42). He engaged in an expedition against the Taipings at Kah-ding and at the capture of that place (in October 1862), and was commander-in-chief during the bombardments of Kagosima and Simonosaki, Japan. He was a Grand Officer of the Legion of Honour and a Commander of the military order of William of the Netherlands—both conferred for services in conjunction with the forces of France and the Netherlands in the Straits of Simonosaki.

Kurdistan. A country of 50,000 square miles in Asiatic Turkey, situated on the Persian frontier, and possessing a million and a half of lawless inhabitants. Too distant from either Constantinople or Teheran to be kept well in order by the Turkish and Persian governments, the Kurds have long been a terror to the surrounding people, and show no inclination to settle down to peaceful occupations. The last best known exploit was a general rising, which took place in 1880, when they invaded Persia, and perpetrating terrible excesses, wasted with fire and sword the country almost up to the gates of Tabriz. At first Persia was totally unable to cope with the invaders, and implored the assistance of Russia, who assembled 5,000 troops on the trans-Caucasian border to march to their aid. However, Turkey, hitherto a conniver at the invasion, seeing in it a revenge for the help Persia had afforded Russia in the war of 1877-78, exercised pressure on the Kurds, and they fell back across the border. Since then they have been quieter, but it is hardly to be expected that they will become pacified until some European power places them under its control—which, in all probability, would be Russia, whose trans-Caucasian border is constantly being crossed by pillaging bands of Kurds from the Persian territory adjoining Kurdistan, cousins to those on Turkish soil, while the Russian Armenians are always clamouring against them on account of the outrages perpetrated against the Armenians in Asiatic Turkey. The Kurds are tolerably brave, and good horsemen, but for want of proper training they have never proved efficient irregular cavalry in recent Turkish wars.

L

Labouchère, Mr. Henry, M.P., was b. 1831. Educated at Eton. Entered the Diplomatic Service (1854), from which he retired (1864), having become 2nd Secretary. Edits and owns *Truth*. Sat as a Radical for Windsor (1865-66), Middlesex (1867-68), and for Northampton since 1880.

Labour Representation. The necessity for the representation of labour in parliament is obvious to any close student of the complicated and closely crowded interests of all classes of society which are almost daily dealt with by the British House of Commons. We should regard the executive government of the country much in the light of an executive council of a corporation or union. Experience suggests that the class or interest whose voice is not heard through its capable representative does not obtain the same amount of attention and consideration as it would if it were so represented. This is precisely what happens in the larger business of the government of the nation, and which has been unmistakably demonstrated by experience in the House of Commons, since the return of working-men to that assembly. Statesmen who care to consult them can do so at all times, with the certainty of having good information from responsible quarters; and, further, the representatives themselves can insist upon and force upon the attention of statesmen the views of the labouring classes, and argue them in debate. Labour representation also affords a certain measure of security and confidence in public affairs, inasmuch as no class is excluded from the highest council chamber. Labour representation is making great progress, but it will not be complete until it extends to the Government itself. We cannot, however, realise this completion of representation in the earlier stages of the movement, but it will certainly follow in good time. Labour representation in town councils, school boards, boards of guardians, and local boards, are for all practical purposes quite as valuable and immediately useful to the interests of the working people as representation in parliament. The work of starting on the career of life the future men and women of the country, as is done by the educational system, and the protection and care of what are termed the pauper classes, but which we prefer to call national pensioners, is in our opinion a highly sacred duty; and where men and women have fallen upon these means of relief through no fault of their own they should be treated with the greatest care and kindness consistent with a due regard for the public rates. Most of our town councils having taken charge of their own local works, such as water, paving, street cleansing, etc., are, in addition to the other duties devolving upon them, great corporate bodies of employers. Therefore the work-people are most deeply and immediately concerned in the administration of the affairs of such municipalities. There are twelve labour candidates returned in the present parliament.

Labour Test. See PAUPERISM.

Lacaita, Mr. Charles Carmichael, M.P., son of the late Sir James Lacaita. Educated at Eton and Oxford. Barrister-at-law. Late

private secretary to Lord Granville. Returned in the Liberal interest as member for Dundee (1885).

Lady Clerks. The experiment of employing ladies as clerks was first tried about the year 1870, the initial step having been taken by the Government. When the electric telegraphs of the country were taken over by the Crown in that year, the large number of 700 females was at once employed by the Post Office, where since they have continued to manipulate the various instruments at the Central Telegraph Office. The Government, in addition, employ a large staff of ladies in the Post Office as clerks. The branches in which they are employed are attached to the Receiver and Accountant General's office and the Savings Bank Department, where the duties are of an important and responsible character. The hours are from 10 a.m. to 4 p.m., and the scale of salaries is, for the second or lowest class, £65 by £5 a year to £80; first-class £85 by £7 10s. a year to £100; and principal clerks £110 by £10 to £150. The superintendents receive £180 by £15 annually to £300. **Admission** to female clerkships in the Post Office is obtained by open competitive examination, of which full particulars are furnished on application, by the Civil Service Commission, Cannon Row, Westminster. Female sorters and returners are also employed in the Post Office. They are, however, of a lower grade, and receive much smaller salaries than the female clerks. These situations are also thrown open to public competition. The success of the Post Office in the experiment of employing ladies on clerk work has induced many commercial firms to follow the example. Their employment by lawyers for copying purposes is extensive, and their usefulness in this capacity is evidenced by the advertisements seeking law copyists of this class which appear in the press. The **Prudential Assurance Company** was one of the first to come to the front in making the experiment; and for many years past has employed a staff of over seventy ladies in its "industrial branch." The services of these ladies have given great satisfaction. Many of the railway companies now largely employ lady clerks; and many other institutions might be mentioned where the usefulness and fitness of ladies as clerks have been successfully and satisfactorily proved. No opposition has been displayed against the scheme. It does not appear, however, to have ever been the aim of the promoters in employing ladies as clerks to supplant men in this capacity. The idea would seem to be simply to allow ladies of education and refinement to earn a living by the performance of the simpler and perhaps more mechanical kind of clerk work.

"La Gloire." See NAVY, BRITISH.

Lagos. See WEST AFRICAN BRITISH POSSESSIONS.

Lagthing. See SWEDEN.

"Laissez-faire" (literally leave to act), is the term used to express the principle of individual liberty versus state control. Philosophically it has been most ably defended by Mr. John Stuart Mill in his celebrated "Essay on Liberty," and by Mr. Herbert Spencer (*q.v.*)

in his recent paper on "The Man *versus* the State." Amongst practical politicians one of its most conspicuous defenders is Mr. Goschen (*q.v.*). The Liberty and Property Defence League, of which Lord Wemyss is president and Lord Bramwell a conspicuous member, has been professedly formed for the purpose of insuring respect for the "Laissez-faire" principle, although the opponents of the League assert that it takes too limited a view, both of personal liberty and the rights of property, and contend that it really exists for the purpose of promoting the interests of the proprietors of monopolies and vested interests. Politicians of various shades of opinion profess admiration for "Laissez-faire," and look with jealousy upon the interference of the state in matters relating to individuals. They regard with misgiving the alleged centralising tendencies of modern legislation. The state, it is complained, has exercised its authority in the regulation of affairs which ought to be left to individual control. It has stepped in between parent and child, master and servant, landlord and tenant. The defenders of such interference, however, justify it on the ground that the protection of the weak against the strong is the first duty of civilised government. They deny, moreover, that the assumption of this authority by the state has an exclusively centralising tendency, urging that the forces of modern legislation are centripetal as well as centrifugal, and that it is only by adjusting the balance of these forces that we can hope to realise an ideal state of society. The interference of the state in enforcing education and regulating contracts, if it restrain the liberty of the strong, insures the liberty of the weak, and therefore really operates in the direction of a considerable extension of the principle of "Laissez-faire." A favourite objection of the professed advocates of that principle is that the state is an uncertain quantity—that it is the creation of general elections fought out by popular prejudice and passion—the creature, in fact, of the periodical manifestation of public opinion hastily formed. It is further objected to state interference, that it involves a large increase in the machinery of officialism, and consequently largely augments the burden of taxation. The advocates of state interference, however, only justify it when as they think it can be safely resorted to in the general interests of the community, and with a view to the promotion of the greatest happiness of the greatest number.

Lake School, or **Lakists**, is the name given to those poets who, at the commencement of the present century, inaugurated as remarkable a revolution in literature as the great revolution in the principles of government and society in France, to which they owed their inspiration. Some of them, however, including Wordsworth and Coleridge, subsequently manifested their revulsion from the French revolution, in consequence of its excesses. The name given to the school arose from the fact that Wordsworth, the founder of it, with Coleridge and Southey his disciples, took up their residence in the beautiful Lake district of Cumberland. Wordsworth, who was born at Cockermouth in that county, after completing his education at the university early, retired to his native mountains, and spent the greater part of his life amongst their solitudes. Rydal Mount, where he lived

with his sister, has become historical through his associations with it. The Lake poets have left a permanent influence, not only in English literature, but in all literature. They led man back to Nature, and taught him to look for the philosophy of his own life and destiny in contemplating the phenomena and entering into communion with the mysteries of the universe. Previous to the Lakists, our poets had trusted for their inspiration to the ancient mythologies, to the great events of history, or to the romantic incidents of social and national life. Shakespeare and his contemporaries were the poets of man—of man individually as the subject of aspirations and emotions, of humour and pathos, of laughter and tears; Dryden and his contemporaries were the poets of man as a constituent element of social and political life; but Wordsworth and his contemporaries were the poets of man in his relation to the universe.

Lakh. A term used in India to express the number 100,000 in the computation of money. A lakh of rupees = 100,000 rupees. In 1835, when the currency was remodelled, the value of the rupee was fixed at two shillings. A lakh of rupees is therefore equivalent to £10,000.

L'Alliance Company. See DYNAMO.

Lalor, Mr. Richard, M.P., was b. 1823, and is a civil engineer and tenant-farmer. He is J.P. for Queen's County. Returned as a Nationalist for Queen's County (1880-85); re-elected, Leix Division (1885).

Lamarck. See NATURAL SELECTION.

Lamellibranchiata. See ZOOLOGY.

Lamington, Alexander Dundas Ross Wishart Cochrane-Baillie, 1st Baron (creat. 1880); b. 1816; eldest son of the late Admiral Sir Thomas John Cochrane, G.C.B. Had a seat in the House of Commons for many years before being raised to the peerage.

Lammas Fields. See LAND QUESTION.

Lampson, Sir Curtis M., d. March 19th, 1885. He was b. in Vermont, United States, 1806, but in 1848 became a naturalised British subject. When, in 1856, a company was formed to lay an Atlantic cable, Mr. Lampson was appointed one of the directors, and became vice-chairman. The aid rendered by Mr. Lampson in that work was acknowledged in a letter from Lord Derby to Sir Stafford Northcote, who presided at a banquet given at Liverpool on October 1st, 1866, in honour of those gentlemen who had taken an active part in the enterprise. In the following month he was created a baronet.

Lancelet. The. See ZOOLOGY.

Land Act, The (Ireland), passed in 1881, gave practically what were known as the "three F's"—fixity of tenure, free sale, and fair rents. Under the Act tenants are empowered to apply to land courts for a revision of their rents, and the rents then fixed are called **judicial rents**. Up to July 31st, 1885, the total number of applications to have fair rents fixed in court were 122,599; the total number disposed of, 118,909; the total number of cases fixed out of court, 84,074. Under another section of the Act the tenants are empowered to make application to have their leases declared void. This part of the Act has not worked very effectively. Up to July 31st, 1885, there were 1500 applications, and but 145 leases were declared void. An appeal lies from the land court, presided over by the sub-commissioners, to the Chief Land Commission. There have been, up to July 31st, 19,952 appeals. Of these 5,514 have been heard, 578 dismissed or struck out,

4,843 withdrawn, and 10,929 disposed of in these various ways, out of the total of 19,952, up to August. In the three years ending August 21st, 1884, the sub-commissioners had fixed judicial rents on 2,118,310 acres 1 rood 25½ perches. The former rent was £1,407,465 3s. 11½d., the judicial rent £1,133,174 18s. 4d., and the percentage of reduction 19·4.

Landes, The. See FORESTRY.

Land-Goschen. See BECHUANALAND.

Land Question, The. The roots of our existing land system can be traced far back beyond the Norman Conquest into the Anglo-Saxon period of English history. The **village-community**, or **mark**, was a society of kindred families, the heads of which enjoyed each a separate allotment, as well as a share in the common pasturage or woodland. Careful research has gone far to prove that, until the end of the last century, land in many English parishes was still cultivated on a system manifestly derived from that of the old village-communities; that "**Lammas-fields**" are nothing but fields which have remained subject to the old rights of joint pasturage over the fallows and stubble of the arable "**mark**"; that **enclosure of commons**, mainly for the benefit of great landowners, is but the continuation of the process whereby demesne-land encroached upon the common pasture or "**folk-land**"; and that the lords of manors are legally, if not lineally, descended from the stronger members of Saxon townships, whose "**properties**" ultimately swallowed up the shares of their poorer neighbours in the *ager publicus* of the village. The freeman would combine the functions of landlord, farmer, and labourer; although in some respects, no doubt, there would be an elementary co-operation, as in the tendance of the herds on the common fields, and in the interchange of implements and assistance. This system extended over the greater part of the country, but not over the whole; and probably it did not stand alone. The **manorial system** (see MANOR), it seems most likely, operated concurrently with it. At length the village-communities yielded gradually to the pressure of the manor lords, and accepted generally a position of vassalage, of such a nature that the transition to the system of feudal tenures was effected without any apparent violence. The **manor** for the most part had the same boundaries as the parish. The best part of the cultivated land, ranging from one-quarter to one-half, formed the lord's private demesne, and was tilled under the bailiff, either by villeins performing forced labour, or by free labourers working for hire. The rest of the cultivated land was divided between **free tenants** and **villeins**, each possessing the rights of pasturage, and often of **turbary** (*q.v.*), over the waste. The 1,400 **tenants-in-chief**, and 7,871 **sub-feudarii**, who owned all the manors in England under the Conqueror, are the prototypes of the two or three thousand noblemen and squires who now own full half of England and Wales. The free tenants and higher orders of villeins are the prototypes of the modern tenant-farmer, being more dependent on the landlord for protection, though always enjoying fixity of tenure, when they did not hold under lease. The lower orders of villeins are the prototypes of the modern farm-labourer, to whom they were inferior in so far as they were attached to the soil, but superior in so far as they had a proprietary

interest in the soil, and could look down upon a slave class which still existed beneath them. While the lord owed certain dues to the king, he received from his tenants, free and serf, a fixed rent, in money or in kind or in labour, but in every case fixed. The rent paid, the free tenant could act as he chose: he could transfer his holding to another, and leave the manor. The serf, too, on satisfying the rent or giving his labour, was at liberty to work for wages on another's land, or even on his lord's land; but he might not leave the manor without licence, and he was subject to numerous small fines for the various liberties which he could obtain. The "**Black Death**," in the middle of the fourteenth century, disarranged the whole organisation of labour; and the Statute of Labourers, passed in consequence, led directly to the **Peasant Revolt** of 1381, which resulted in the superiority of the serfs, and the rapid development of tenure in villeinage into copyhold or customary tenancy. The scarcity of farm labour led also to an extension of the system of leases, which had already been in partial use, and was now adopted over most part of England. The fifteenth century has been called "**the golden age of the old English yeomanry**"; and in the reign of Henry VI. Sir John Fortescue was able to boast that no country in Europe possessed so many small proprietors as England. In the next century, under Elizabeth, the position of yeomen was described thus:—"These commonly live wealthy, keep good houses, and travail to get riches. They are also for the most part farmers to gentlemen, or, at the least, wise artificers; and with grazing, frequenting of markets, and keeping of servants—not idle servants, as the gentlemen do, but such as get both their own and part of their master's living—do come to great wealth, inasmuch that many are able and do buy the lands of unthrifty gentlemen, and often setting of their sons to the schools, to the universities, and to the inns of court, or otherwise leaving them sufficient lands whereby they may live without labour, do make by those means to become gentlemen. These were they that in times past made all France afraid." At the same time there were in active operation causes that materially limited the extension of this happy condition of the middle class. Under the military system of the Norman kings, the eldest son was entitled to inherit his father's estate, if held by **knight service**; and by the end of the thirteenth century the principle was extended by custom to **socage tenures**. Under Saxon law, the estate of a freeholder dying without a will was divided equally among his children, according to the national custom of **gavelkind**, which has fallen into desuetude, except in Kent; while this law of primogeniture has usurped its place, and has determined the descent of land on intestacy in England for more than 600 years. **Entails**, however, have exercised a far wider influence, and indeed the chief influence, in crushing out the race of small proprietors. For two centuries after the Conquest the Crown and the Church joined hands to thwart the determination of the nobles to effect entails, whereby their fiefs and property would, in spite of any treasonable acts of their own, pass safely to their successors. But in 1285 the statute "**De Donis**" was passed, under which perpetual entails could be created; and the result was speedily seen in the diminution of

the number of owners of land. Mr. Shaw-Lefevre has pointed out that this Act, which is still on the statute-book, and part of the law of this country, never obtained the consent of the Commons. Before the lapse of two centuries more, the ingenuity of the lawyers was again applied to upset these perpetual entails. "Children," says Blackstone, "grew disobedient when they knew they could not be set aside; farmers were ousted of their leases made by tenants-in-tail; creditors were defrauded of their debts; innumerable latent entails were produced to deprive purchasers of lands which they had fairly bought; and treasons were encouraged, as estates tail were not liable to forfeiture longer than for the tenant's life." In 1472, in "*Taltarum's case*," by a kind of collusion between the courts of law and the immediate holder of an entailed property, a way was found whereby the entail could be broken and the property set free to be sold. In the reign of Henry VII. an Act was passed expressly legalising *disentail* by "fines." Henry VIII., however, deprived entailed estates of their immunity from forfeiture on conviction of their holders for treason. By the dissolution of the monasteries, two-fifths of the whole land of the kingdom came into the hands of generally needy proprietors; and the slowly gathering distress was intensified by the exacting policy of James, and made itself felt in opposition to the Crown in the struggle of the Civil War. The two centuries' freedom from entails, from Taltarum's case to the great Rebellion, again permitted the free alienation of land; and Mr. Shaw-Lefevre has remarked "that these 200 years, when land was practically free from the shackles of entail, when the holders of estates were really their owners, and not merely the ostensible owners or temporary enjoyers of them, were not the least memorable years of English history, or the least fruitful of great Englishmen. *Burleigh, Hatfield, Longleat, Audley End, Holland House, and Bramhall*, and numerous other great mansions, were built in this period, and still survive as evidence that even in days when landowners were in full possession of their property, they did not fear to build for a long future." The Royalist disasters of the Civil War promptly revealed the dangers of forfeiture. The lawyers and judges now laboured to reverse the existing and advantageous policy. Bridgman and Palmer accordingly devised the system of strict settlement, which vested the property in the unborn, and converted the immediate possessor into a mere life-holder, "without any real power over the property, without power to sell, or even to lease for any period beyond their own lives, and without any power of bequest in favour of other children than the one named in the settlement." When the two authors of the system became Crown officers, after the Restoration, they "in their administrative capacity gave validity to the devices which they had invented as conveyancers." Meantime the devices served the intended purpose of limiting forfeiture to the life estate in case of conviction for treason. The same justification does not seem to have much practical basis in these modern days. Mr. Shaw-Lefevre also points out that "this system has never received the assent of parliament. It was the invention of lawyers, and was sanctioned by the courts of law, but has never been subjected to popular control." The effect of

entail in aggregating land and discouraging its dispersion among small owners is very clear, even from our rapid historical review. What now ties up the land is the custom of making *Family Settlements*. The process is best described by the late Mr. Joshua Williams:—"In families where the estates are kept up from one generation to another, settlements are made every few years for this purpose. Thus, in the event of a marriage, a life estate merely is given to the husband; the wife has an allowance for pin-money during the marriage, and a rent-charge or annuity by way of jointure for her life, in case she should survive her husband. Subject to this jointure, and to the payment of such sums as may be agreed on for the portions of the daughters and younger sons of the marriage, the eldest son who may be born of the marriage is made by the settlement *tenant-in-tail*. In case of his decease without issue, it is provided that the second son, and then the third, should in like manner be tenant-in-tail, and so on to the others; and in default of sons, the estate is usually given to the daughters,—not successively, however, but as "*tenants in common in tail*," with "*cross-remainders*" in tail. By this means the estate is tied up till some tenant-in-tail attains the age of twenty-one years; when he is able, with the consent of his father, who is tenant for life, to bar the entail with all the remainderers. Dominion is thus again acquired over the property, which dominion is usually exercised in a re-settlement on the next generation; and thus the property is preserved in the family" ("Principles of the Law of Real Property," Part I., chap. ii.).—The Law of *Primogeniture* (*q.v.*) is quite incapable of defence. The military reason has ceased to be valid. Now it operates disadvantageously and unjustly. But it does not operate frequently; for intestacy is a very rare occurrence in the case of landed proprietors. And when it does happen, the heir either is not or need not be hampered; as tenant in fee simple he at once obtains free power of disposition; or, as tenant in tail, he can execute a deed and enrol it in the Court of Chancery, and thus set himself free. But the drift of opinion seems decidedly in favour of assimilating the landed property to the personal property of an intestate, and dividing it equally among his children; although it is not to be forgotten that legislative attempts in this direction during the last half-century have been generally unsuccessful. Perhaps one of the worst effects of the Law of Primogeniture has been its influence "in moulding the sentiment of the class by which the Custom of Primogeniture is maintained. From this point of view it is certainly a significant fact that no sooner was the Law of Primogeniture swept away in the United States than equal partibility became the almost universal custom, notwithstanding that American landowners are by no means destitute of family pride, and enjoy very nearly the same liberty of devising or settling their estates as an English proprietor." The Custom of Primogeniture, however, is a much more serious matter. Through the system of Settlements "a dying man may tie up the land so that no living person shall be full owner of it, and it shall go to some unborn child, and not be his until he is twenty-one years old." A series of *Settled Estates Acts* have been passed, ostensibly to render all settled property capable of sale;

but the "elaborate precautions for the protection of every interest, both actual and contingent," have effectually reduced their operation to almost a minimum. **Lord Cairns's Act of 1882** was directed to the mitigation of the worst results of the system, but it is most inadequate; "the land is treated as an instrument for maintaining family dignity, instead of being treated as a source of national comfort and well-being." Mr. C. A. Fyffe, M.P., has "pointed out exactly what Lord Cairns's Act does and what it has left undone. All that Lord Cairns's Act enables a landlord to do under a settlement is, to sell the land in such a way that the money shall pass, not to him, but to the trustees of the settlement, in whose hands it will remain. The trustees may make certain use of this money, no doubt, in improving the land; but the capital will be theirs and not the landlord's; and under this Act it is not open for any landlord to say, 'I am sick and tired of the business of land-ownership; I intend to sell the land outright, and with the money I get for it to go into some other calling.' The Act gives him no sort of power to sell his land for that purpose, because the money does not come to him but to the trustees, and they are bound to keep it in favour of those who are to come afterwards; the landlord receives the interest only, and cannot touch a penny of the capital, except under certain restrictions." There is a strong tendency to sweep away entails and settlements once for all; and those who are not prepared for this step may not be wholly unwilling to accept the provision of **Mr. Shaw-Lefevre's Bill of 1878**, requiring settlements of realty "to take the form of the ordinary settlements of *personalty*—namely, to a person for life, with remainder to his children as he shall appoint." Mr. Osborne Morgan, M.P., expresses the advanced view thus: "The measure which, in my judgment, is most wanted to meet the urgent requirements of the present day is a measure giving to every person of full age and sound understanding entitled to the beneficial enjoyment of landed property for his own life, and to every person who, either by actual assignment (as a purchaser or mortgagee), or by operation of law (as a trustee in bankruptcy or an execution creditor), is entitled to stand in his place, the right to sell the land out and out, subject to only two conditions: first, that the sale be an honest one; and secondly, that the purchase may be secured and applied for the benefit of all persons interested in the land itself."—The **Transfer of Land** has for many years engaged the laborious attention of some of our greatest official lawyers. The machinery of transfer, it has been justly remarked, "seems specially constructed for the discouragement of small holdings and of limited capitalists." The delays are interminable: "I should say," said Sir Hugh Cairns, "that it is an uncommon thing for a purchase of any magnitude to be completed—completed by possession and payment of the price—in a period under, at all events, twelve months." The expenses also are very great, and all but prohibitive. Apart from the possible misconduct of solicitors, great expense may easily arise from the complexity of titles, and half an acre may involve more investigation than a whole county. And when the transfer is accomplished and the expenses paid, the result is not satisfactory. Mr. Freshfield, an eminent solicitor, stated in evidence that "title by deed can never be de-

monstrated as ascertained fact, but can only be presented as an inference more or less probable, deducible from the documentary and other evidence accessible at the time." The door stands wide open for the entrance of fraud. The legislative attempts of 1862 and 1875, in the light of the reports of laborious committees, have proved melancholy failures; and Lord Cairns's Conveyancing and Law of Property Act avoids the real difficulty. For the colonies, at all events, the question has been solved by Sir Robert Torrens. "Land," said Sir Robert, in his evidence before the **Land Titles and Transfer Committee**, "is brought under this Act upon the application of the owner in fee simple. He is obliged to produce his deeds with an abstract, which is examined by a solicitor appointed by the Government for that purpose, and if it is found that a *prima-facie* title is made out, and is proved by application and inquiry that the applicant is actually in possession, then advertisement is made that So-and-so claims to be recognised as owner in fee of such-and-such lands, and a time is appointed within which persons desiring to oppose his receiving an indefeasible title shall put in their objections. After that advertisement, and no claim arising, then an indefeasible title is given to the applicant, and it is issued in this form: All the deeds are set aside, and a certificate is drawn out stating upon the face of it all that the land is then liable for, such as jointures, mortgages, leases, and everything of that description; and all the certificates of title are in duplicate, just as the old ship's registry used to be." The conveyance of property is effected by registration; the description of the land is entered in the register-book, with the names and description of the parties. Mr. Trevelyan adopted this principle in the bill he introduced last session to facilitate the acquisition of land by Irish farmers. "It might be too expensive a thing," says Mr. C. A. Fyffe, M.P., "to compel every landowner to register his existing title; and if a landlord does not choose to do so, it might be harsh to make him do this and pay the costs attending it; but the least we have to demand is that every future transfer of land shall be effected by means of the register; and then, as land comes more and more into the market, little by little the old titles will pass away, and all the cumbrous apparatus which comes down to us from the feudal days will disappear, or be cherished only as curiosities among the archives of county families."—The necessities of agriculture demand that more capital shall be attracted to the land. The pressure of foreign competition is severely felt; and the disastrous weather of the past seven years has strained the whole system almost to disruption. Thousands of cultivable acres lie, in dozens of counties, uncultivated. The first essential of success is security; for capital will not be applied in the absence of reasonable security. The **Agricultural Holdings Act (q.v.)** of 1883, indeed, secured for tenants compensation for their improvements; but it is still possible for a landlord who does not mind paying the compensation to demand an exorbitant rise of rent from a tenant on the expiry of his lease, or to turn him out of his farm. This should be impossible. And, with absolute security in this respect, it is further necessary that tenants be permitted the fullest liberty of following their own ideas as to how to extort the richest

return from the land. Moderate reformers are prepared to demand, with Mr. C. A. Fyffe, these three points:—“(1) No tenant to be removed from his holding without the permission of a District Land Court, such permission to be given on reasonable ground, such as the bad farming of the tenant, or the *bonâ-fide* intention of the landlord to occupy the ground himself, or to turn it to some use more beneficial to the public than agriculture. (2) The land court must have the power of fixing rents in cases of dispute, and of reducing them even in the case of existing leases. (3) The farmer should have the right of selling his tenancy to any one whom he chooses, subject to the landlord's right to urge any objection to the new tenant before the District Land Court. The new tenant to hold on the same terms as the old—that is, not to be ejected, or to have his rent raised, without the sanction of the court.”

Mr. Barclay's bill includes all these points.—The timely concession of an Act in which the facts of the situation should be honestly recognised would relieve the tension in the greatest of all our industries, and bring to the ground a variety of projects, the outcome of honest zeal without sufficient knowledge, or the product of reckless demagogism. The respected name of Dr. A. R. Wallace is attached to the exposition of a scheme for the **nationalisation of the land** only less drastic than the proposals of Mr. Henry George (*q.v.*) He calls for the enactment of a law under which all property in land “shall legally descend for four generations beyond the existing owner, and then pass to the State.” The promises of irresponsible pamphleteers to working men, as the result of their occupation of the soil, are of too extravagant a character for discussion here. They derive all their power for mischief from the delay of the legislature to accord to the Land Question the serious and timely consideration which it urgently demands. If the farmer must yet obtain large concessions from the landlord, he on his part must be prepared to yield large concessions to the **agricultural labourer**. The hours of work will have to be shortened; reasonable cottage accommodation will have to be provided, probably by the landlords; and allotments, if desired, will have to be provided, under compulsory powers granted to the local authority established under some new system of county government. If the “three acres and a cow” be not provided literally, there must be opened up the prospect of a reasonable reward to thrift and industry. Among the many schemes for the amelioration of the land may be mentioned the Allotments and Small Holdings Bill, introduced by Mr. Jesse Collings, but which was “talked out” (March 31st, 1886), on its second reading. A measure dealing with the land is, however, likely before long to be introduced by the Government, as stated by Sir W. Harcourt on the occasion of the recent debate on Mr. Collings' bill. Mr. Broadhurst's bill, now in charge of Mr. W. Lawson, member for West St. Pancras, for enabling the leaseholders of houses and cottages to purchase the fee simple of their property, is another step in the desired direction. The following are the objects of the **Free Land League**:—(1) Abolition of the law of primogeniture. (2) Abolition of copyhold and customary tenure and obsolete manorial rights. (3) Prohibition of settlement of land upon unborn persons,

and of the general power of creating life-estates in land. (4) Conveyance by registration of title—all interests in the property registered to be recorded. (5) Provision for the sale of encumbered settled property. (6) Preservation of commons and of popular rights over land and water, and restoration of any illegally taken in recent times. (7) Enfranchisement of long leaseholds. (8) Amendment of the law of landlord and tenant, calculated to promote and further to protect improvements (9) Promotion of the acquirement of land by the people, for residence and cultivation, both by general laws and by the instrumentality of municipalities and other local bodies.” (Consult Brodrick's “English Land and English Landlords,” Shaw-Lefevre's “English and Irish Land Question,” I. S. Leadam's “Agriculture and the Land Laws.”)

Land Reform Union. See ENGLISH LAND RESTORATION LEAGUE.

Land Registration. See LAND QUESTION.

Land Tax. The existing land tax dates from the year 1692, when the parliament granted to William and Mary an aid of sixty in the pound to meet the expenses of the war with France. This aid was to have been levied on the rackrent of all real estate, upon all stipends or salaries, and upon personal property; the annual income from this last being assumed at £6 per cent. of the capital value. The tax was renewed from time to time subsequently, but personal property contrived to evade assessment. The valuation of real property, made in 1692, was never replaced by a new one. In the year 1798 the tax produced about £2,000,000, of which only £150,000 was levied upon personal property. In that year it was replaced (a) as regards land by a perpetual rent-charge, power of redemption being given to those interested in the property which paid it; (b) as regards personal property by a tax annually imposed; this tax was abolished in 1833. So much of the land tax has since been redeemed, that it now produces not more than £1,000,000 a year. Upon the subject of this tax there have been many inaccurate statements. (See Dowell, “History of Taxation and Taxes,” vol. iii., Bk. II., chapter i., § 5.)

Land, Transfer of. See LAND QUESTION.

Lane, Mr. William John, M.P., was b. 1849. Educated at the Vincentian Coll., Cork. Member of the Cork Town Council. He was the originator of the National Industrial Exhibition (1882), and took a prominent part in promoting the Cork Industrial Exhibition (1883). Returned in the Conservative interest as member for East Cork (1885).

Lanesborough, John Vansittart Buller, 6th Earl of (creat. 1756); b. 1859; succeeded his uncle in the title 1866. Is an Irish representative peer.

Lange, Prof. See OLD CATHOLICS.

Langford, Hercules Edward Rowley, 4th Baron (creat. 1800), was b. 1848, and succeeded to the title 1854. Irish representative peer.

Lansdowne, Henry Charles Keith Fitz-Maurice, 5th Marquis of (creat. 1784); b. 1845; succeeded his father 1866. Was Under-Secretary for War (April 1872 to Feb. 1874), and Under-Secretary India Office (May to Aug. 1880); has been Governor-General of Canada since 1883. The first Marquis (better known as Lord Shelburne) was a distinguished minister in the reign of George III.; the third Marquis was also a very distinguished minister during the reigns

of George IV., William IV., and Her present Majesty. The fourth Marquis, who sat in the House of Lords as Baron Wycombe for some years before he inherited the marquissate, was a Secretary of State and a Lord of the Treasury.

La Plata. See ARGENTINE REPUBLIC.

Lapworth, Mr. See GEOLOGY.

Laaker, Dr. Edward. See GERMAN POLITICAL PARTIES.

Latent Heat. See HEAT.

Lateral Council. See REAL PRESENCE.

Latham, Mr. George William, M.P., was b. 1827, educated at Brasenose College, Oxford. Called to the bar at the Inner Temple (1852), and went the North Wales and Chester circuit. Is J.P. for Cheshire and Crewe. After unsuccessfully contesting the borough of Crewe on three occasions (1863-80-83) he was returned in the Liberal interest for Cheshire, Crewe Division (1885).

Lathom, Edward Bootle-Wilbraham, P.C., 1st Earl of (creat. 1880); b. 1837; succeeded his grandfather as 2nd Baron Skelmersdale 1853. Was a Lord-in-waiting to the Queen (July 1866 to Dec. 1868); has been Lord Chamberlain of Her Majesty's Household (June 1885), and was appointed one of the Speakers in the House of Lords (1882).

Latin Monetary Union. See BIMETALLISM.

"La Tour, Tomline." See NOMS DE PLUME.

Latter Day Saints. See MORMONISM.

Lauderdale Peerage. See PRIVILEGES, COMMITTEE FOR.

Laurent. See POLARISCOPE.

Lawn Tennis Championship. See TENNIS.

Lawrance, Mr. John Compton, M.P., Q.C., was b. 1832. Called to the bar at Lincoln's Inn (1859); Queen's Counsel (1877). Became Recorder of Derby (1880). Returned in the Conservative interest as member for South Lincolnshire (1880-5); re-elected for Stamford Division (1885).

Lawrence, John Hamilton Lawrence, 2nd Baron (creat. 1869); was b. 1846, and succeeded to the title 1879.

Lawrence, Sir John James Trevor, M.P., was b. 1831. Educated at Winchester. For ten years he belonged to the Medical Service of the East India Co., from which he retired (1863). Returned in the Conservative interest as member for South-East Surrey (1885).

Lawrence, Mr. William Frederic, M.P., of Cowesfield House, Salisbury, was b. at Liverpool, 1844. Educated at Eton and Christ Church, Oxon. Called to the bar at Lincoln's Inn, 1871. Is a J.P. for Wiltshire. Returned in the Conservative interest as member for Abercrombie Division, Liverpool (1885).

Lawson, Mr. H. L. W., M.P., son of Mr. Edward Levy Lawson, J.P., D.L., of Hall Barn, Bucks, was b. 1862. Educated at Eton and Balliol Coll., Oxford, taking first-class honours in the final school. Returned in the Liberal interest as member for West St. Pancras (1885).

Lawson, Sir Wilfrid, Bart., b. at Brayton Hall, Cumberland, Sept. 4th, 1829, and succeeded to the baronetcy on the death of his father, who was a gentleman of strong temperance and anti-slavery principles. In 1859 Mr. Wilfrid Lawson, with his uncle, was returned to Parliament for Carlisle, when he at once gave his support to the extreme section of the Liberal party, voting in favour of peace, freedom of the ballot and franchise, and the

propositions of Cobden and Bright. His declaration of temperance principles at a United Kingdom Alliance (q.v.) meeting in Manchester, and his introduction into the House of Commons of his "Bill for the Legislative Suppression of the Liquor Traffic" on March 4th, 1864, lost him his seat the next year. He was, however, again returned in 1868 for the same city, which he continuously represented till the general election of 1885, when, Carlisle becoming a one-membered constituency, he stood for the Cocker-mouth Division of Cumberland, but was defeated by ten votes. Sir Wilfrid Lawson has thrice successfully proposed his Local Option (q.v.) Resolution, and Mr. Gladstone has in the House expressed his intention to include in any measure the Government may bring forward to deal with the drink question "the reasonable and just principle" for which Sir Wilfrid contends. Sir Wilfrid Lawson is best known as the President of the United Kingdom Alliance, to which office he was elected on the death of Sir W. C. Trevelyan. He was a well-known figure in the House of Commons, where, as in the provinces, he was deservedly popular. His speeches, enlivened with humorous touch and racy anecdote, are appreciated even by those who differ from him. He is, and has been since his first appearance in Parliament, a consistent and thorough-going Radical; and his opposition to war, perpetual pensions, and adjournments of the House over the Ascension and Derby days, is well known. His crisp epigrams and parodies, and rollicking rhymes, are occasionally seen.

Lawyers Deceased, 1885—March 1886. See OBITUARY (APPENDIX).

Layard, Sir Henry. See ASSYRIOLOGY and BIBLICAL ARCHAEOLOGY.

"Layman, A." See NOMS DE PLUME.

Laymen, House of. A House of Laymen assembled for the first time with the Houses of Convocation at the opening of the new parliament. It is composed of ten representatives from the diocesan conferences of London, six each from those of four of the largest dioceses in the province, and four each from the remaining dioceses. To the representative body so formed the Primate may add ten laymen by nomination. Chairman, Lord Selborne; Chairman of Committee of the House, Lord Beauchamp. The first sitting took place Feb. 17th, 1886, when rules of procedure were adopted; the most important being that the procedure of the House of Commons should be as far as practicable adopted. The Bishop of Peterborough brought under the notice of the House a draft Church Patronage Bill to be introduced by the Archbishop of Canterbury in the House of Lords, which was discussed by the members present. It is anticipated that an adequate representation of all Church interests, lay as well as clerical, will be effected by the institution of the House. The House of Laymen will not concern itself with doctrine.

Leading Theme. See LEITMOTIF.

Leahy, Mr. James, M.P., was b. 1822. Returned as a Nationalist for co. Kildare (1880-85); South Kildare (1885).

Leake, Mr. Robert, M.P., The Dales, Whitefield, near Manchester, b. 1824, is the eldest son of the late Mr. Robert Leake, of Manchester. Connected with the firm of Lockett, Leake, and Co., Manchester, and was

president of the Manchester Reform Club and the Liberal Associations of Manchester and Salford. Returned in the Liberal interest as member for Radcliffe Division, South-East Lancashire (1885).

Leamy, Mr. Edmund, M.P., was b. 1848. Educated at St. John's Coll., Waterford, St. Stanislaus Coll., Tullabeg, and Univ. High School, Waterford. He became a solicitor in Ireland (1878), and has lately been called to the Irish bar. Returned as a Nationalist for the City of Waterford (1880-85); North-East Cork (1885).

Leaseholds. A lease conveys property from one person to another either for a life or lives, or for a term of years, or at will. The term leasehold is however confined to such lands or houses as are held under leases for years. Any lease for a term exceeding three years must be by deed. The person letting the property is the lessor; the person to whom it is let is the lessee. Leaseholds are personal property, and descend as such. But for the payment of succession duty they are on the footing of real estate.

Leaseholds Bill. The (now intrusted to Mr. Lawson, since the appointment of Mr. Broadhurst) is no longer called an Enfranchisement Bill, but one for enabling the leaseholders of houses and cottages to purchase the fee simple of their property. Such houses may include chapels as well as any other buildings, the amount of land in connexion with a house extending to three acres. Only long leases are dealt with by the Bill,—viz., those which have at the time more than twenty years unexpired. Existing leases, as well as future, are affected. By one provision of the Bill it is impossible to "contract oneself out of it."

Leatham, Mr. Edward A., M.P., b. 1828; educated at London Univ. (B.A. with honours 1848, M.A. 1853, and Fellow of his Coll.); a J.P. and D.L. for West Riding, J.P. for Gloucestershire, and head of the firm of Leatham, Tew and Co., West Riding Bank. Sat as a moderate Radical for Huddersfield (1852-65, when he was defeated); re-elected 1868, since when he has sat uninterruptedly for that borough.

Leather, Artificial. See WASTE MATERIALS.

Leathersellers, The Worshipful Company of. See CITY GUILDS, THE.

Lechmere, Sir Edmund Anthony Harley, Bart., M.P., was b. 1826. Educated at Charterhouse and Ch. Ch., Oxford. Knight Commander of the Orders of St. John of Jerusalem, and of Medjidie and class, and of the Servian Order of Takova for services rendered to the Turkish and Servian sick and wounded during the Turko-Servian war (1876). Deputy Lieutenant and J.P. for Worcestershire; High Sheriff (1862). Returned in the Conservative interest as member for Tewkesbury (1866-68); West Worcestershire (1876-85); re-elected 1885.

Leconfield, Henry Wyndham, 2nd Baron (creat. 1859); b. 1830; succeeded his father 1869.

Leeds, George Godolphin Osborne, 9th Duke of (creat. 1694); b. 1828; succeeded his father 1872. Is descended from Sir Edward Osborne, Knt., who filled the office of Lord Mayor of London (1582). The first peer was Lord High Treasurer of England.

"Lee Holme." See NOMS DE PLUME.

Legacy Duty. See REVENUE, THE.

Legal Tender. The following are legal tender up to and including the annexed amounts:—

Of the	{ Gold coins . . . up to any amount.
Royal	{ Silver coins . . . " £2.
Mint.	{ 1d. and ½d. coins . . . " 1s.
	{ ¼d. coins (farthings) . . . " 6d.

Bank of England notes are legal tender in England and Wales (except by the Bank of England itself), but a creditor cannot be compelled to give change. If a debtor require a receipt, he must prepare it, stamp it, and offer it for signature to his creditor, who by refusal to sign it renders himself liable to a penalty. The actual notes or coins must be produced by the debtor, and offered in payment, otherwise legal tender has not been made.

Leicester, Mr. Joseph, M.P., was b. 1827, at Warrington, and engaged in early life in the glass-blowing trade. Was presented by the committee of the Glassblowers' Society of Great Britain and Ireland with a purse of £100 in recognition of his services to the trade (1870). Returned in the Liberal interest for West Ham, South Division, Essex (1885).

Leicester, Thomas William Coke, 2nd Earl of (creat. 1837); b. 1822; succeeded his father 1842. Appointed a Deputy Lieutenant of Norfolk (1844), and Lord Lieutenant of that county (1846); Keeper of the Privy Seal to the Prince of Wales (Oct. 1870).

Leighton, Mr. Stanley, M.P., M.A. (Oxon.), was b. 1837. Educated at Harrow and Balliol Coll., Oxford. Called to the bar at the Inner Temple (1861). J.P. for the counties of Salop and Montgomery. Capt 15th Shropshire Volunteers. Returned in the Conservative interest as member for North Shropshire (1876-85); West Shropshire (1885).

Leigh, William Henry Leigh, 2nd Baron (creat. 1839); was b. 1824; succeeded to the title 1850.

Leinster, Charles William Fitz-Gerald, 4th Duke of (creat. 1766); Viscount Leinster, by which last title he holds his seat in the House of Lords; b. 1819; succeeded his father 1874. Is the premier Duke and Marquis and Earl of Ireland. Is one of the Commissioners of National Education in Ireland; was Chancellor of the late Queen's University, Ireland.

"Leith-Adams, Mrs." See NOMS DE PLUME.

Leitmotif. A German musical term very much used at the present day. It may be translated as *leading theme*, and is applied to a short musical phrase, which is considered to express a character or an emotion, and is used in opera, etc., whenever the idea of that character or emotion is desired to be awakened. The inventor of this principle was Berlioz, but it was Wagner who developed it to its present use. Wagner makes whole passages based upon various *leitmotives*,—e.g., the long funeral march for Siegfried.

Leitrim, Robert Bermingham Clements, 4th Earl of (creat. 1795); Baron Clements, by which title he holds his seat in the House of Lords; was b. 1847, and succeeded his uncle, the 3rd Earl, 1878. The family settled in Ireland temp. James I.

Lemoinne, John Emile. French journalist of repute, b. Oct. 17th, 1815. In 1840 he was

appointed London Correspondent of the *Journal des Débats*. He became a member of the French Academy (1876), and was made Senator for life (1880). Portions of his articles have appeared in two vols., entitled "*Etudes critiques et Biographies*" (1852), and "*Nouvelles Etudes*" (1862).

Lenormant, M. See EGYPTOLOGY.

Leo XIII. See POPE, THE.

Leopold II., King of the Belgians. b. at Brussels, 1835, son of King Leopold I., to whom he succeeded. King Leopold has travelled much in Europe, Asia Minor, and Egypt. He is the head of the International Association, whose object is to open to Europeans the Congo and its tributaries. He was the friend of Gordon, whom he had taken into his employ, but was deprived of his services when the latter was summoned from Brussels to go to the Soudan. King Leopold is the staunch friend of the great explorer Stanley. As head of the International Association, he has contributed very largely to the funds of the Society from his private purse. King Leopold married, in 1853, the Archduchess Maria of Austria, by whom he has had two daughters and one son, the Duke of Brabant, who died when two years old.

Leopoldville. See CONGO FREE STATE.

"Lealie, Frank." See NOMS DE PLUME.

Lessar, M. Gospodin, a young Russian officer of Engineers. He was first brought to notice when employed by the controller of the Russian Trans-Caspian Railway, Prince Khilkoff (in 1881) to survey the section of the projected line from Askabad to Sarakhs, lying through a country which had never before been traversed by an European. This he satisfactorily accomplished, returning to Askabad, and then proceeding to Europe to obtain maps of Persia and Afghanistan, in order to prosecute a further survey from Sarakhs to Herat. This journey he accomplished in 1882, not only finding the intervening country to be an uninhabited wilderness, but also that a chain of high mountains which existed *on the map* did not exist in fact, their place being supplied by hills about 900 feet in height, and that this was the best and easiest railway route from Europe to India. M. Lessar returned, after this survey, *via* Meshed, to Askabad, and afterwards proceeded on another surveying expedition to Merv, in order to ascertain whether the waters of the Oxus could be diverted into a channel by which means the country up to Askabad could be irrigated and made fertile. His familiar acquaintance with all this region mentioned above led to his being despatched to England by the Russian Government in the character of a negotiator in the Afghan difficulty, having thus acquired a special knowledge of all the "incidents" belonging to the territory which was the subject of negotiation.

Lesseps, MM. de. See ENGINEERING.

Lethbridge, Sir Roper, M.P., was b. 1840. Educated at Exeter Coll., Oxford. Called to the bar at the Inner Temple (1880). Appointed a Professor in the Bengal Educational Department (1868), and also elected a Fellow of the Calcutta Univ. Secretary of the Simla Educational Commission (1877). Returned in the Conservative interest as member for North Kensington (1885).

Leven and Melville, Alexander Lealie-Melville, 10th Earl of (creat. 1641). Scotch representative peer. Died Feb. 1st, 1886.

Leveson-Gower, Mr. George Granville, M.P., was b. 1858. Educated at Eton and Oxford, where he graduated in honours (1880). Returned in the Liberal interest as member for North-West Staffordshire (1885).

Lewes Meeting. See RACING.

Lewis, Mr. Charles Edward, M.P., was b. 1825. He was in practice for many years as a solicitor. J.P. for the county of Londonderry. Director of the London and Provincial Bank. Returned as Conservative member for Londonderry (1872-85); re-elected 1885.

Lewisham, Rt. Hon. William Heneage Legge, Viscount, P.C., M.P., eldest son of the Earl of Dartmouth, was b. 1851. On the accession to office of the Conservative party he was appointed Vice-Chamberlain of H.M. Household. Is J.P. for Staffordshire and Shropshire, and is captain in the 27th Staffordshire R.V. Returned in the Conservative interest as member for West Kent (1878-85); Lewisham (1885).

L'Extincteur. See FIRE EXTINCTION.

Lias. See GEOLOGY.

Libel, Law of. There are various species of libel: the defamatory libel, the seditious libel, and the obscene libel. Every libel must be written, printed, or in some other way addressed to the eye. One publication might combine the characteristics of all three kinds of libel, but they can best be explained separately. In order to constitute a publication a defamatory libel, it must be false. It must also be malicious in the legal sense; the law presuming malice in every injury done intentionally and without justification. It must further have a tendency to bring its object into hatred or contempt. Further, it must not be privileged. A privileged communication in this sense is either privileged absolutely, or privileged when not malicious. A statement made in a court and in the administration of justice, or in either House of Parliament in the transaction of public business, is privileged absolutely. A statement presumably made in fulfilment of a moral duty to inform the person to whom it is made—*e.g.*, by A to B, his relative, concerning the character of C, whom B is about to marry; or by A, an employer, to B, another employer, concerning the character of C, who has left A's employment and is about to enter B's; or a free criticism of public men, artists, etc.—is privileged, unless it can be shown to be malicious.—A libel is published if seen but by one person other than the person libelled. The publication of a defamatory libel gives ground both for civil and criminal proceedings. The publisher, as well as the writer, is liable to either. In criminal law it is a misdemeanour to publish or threaten to publish a libel, or, as a means of extortion, to offer to abstain from or to prevent others from publishing a libel. The maximum punishment is three years' imprisonment with hard labour.—Any publication published with a seditious intention is a seditious libel, and a seditious intention is an intention to bring into contempt the Sovereign or either House of Parliament, or the administration of justice, or the constitution, or to promote sedition or civil discord, or to bring about alterations in Church or State otherwise than by lawful means. To publish such a libel is a misdemeanour.—Any obscene publication may constitute an obscene libel. To publish such a libel is an offence punishable by imprisonment with hard labour. The truth of such a publication is not sufficient to justify it; but Sir James Stephen

in his "Digest of Criminal Law," suggests that the publication may be justified if it be no more than is necessary to secure some important public good.

Liberal Union, German. See GERMAN POLITICAL PARTIES.

Liberals. See POLITICAL PARTIES (ENGLISH).

"Liberty," The. See ANARCHISM.

Liberty and Property Defence League. See "LAISSEZ FAIRE."

Licensing Acts, 1872, 1874. These Acts contain only a part of the statute law with regard to licensing. The Act of 1872 is the principal Act. It applies only partially to Ireland, and not at all to Scotland. It imposes severe penalties upon the illicit sale of liquor, upon drunkenness in any public place or highway, upon permitting drunkenness or gambling or harbouring prostitutes on licensed premises, upon harbouring any constable on such premises in his hours of duty, and upon bribing or attempting to bribe him. It fixes the hours of closing (altered by the Act of 1874), but enables the local authority to grant exemptions from them when the convenience of many persons engaged in lawful business so requires. It provides that if any licensed person on whose license two convictions for offences against the Act have been recorded is again convicted, he shall forfeit his license, and he shall be disqualified for five years, and his premises for two years, from receiving another. But a conviction more than five years old is not to be taken into account for the purpose of increasing any penalty. In every licensing district must be kept a register of licenses showing particulars of all convictions, etc., and this register must be open to inspection by any ratepayer, holder of a license, or owner of licensed premises. In counties and in boroughs the justices must annually appoint from among themselves a licensing committee of not less than three members. But in boroughs no license granted by this committee is to be valid unless confirmed by the body of justices who would, but for the Act, have been authorised to grant licenses. Premises not already licensed at the passing of the Act cannot receive a license unless they are of an annual value fixed by the Act with reference to their situation. Penalties under the Act are recoverable by summary conviction, subject to an appeal to Quarter Sessions. No justice who has any beneficial interest in the manufacture or sale of intoxicating liquors can do anything under this Act. The Act of 1874 contains many modifications of the Act of 1872, and of these several mitigate the severity of the law. But both are so long and intricate that for precise information a reference to the text is necessary.

Licensing System. The name given to that legal arrangement under which licenses for the sale of intoxicating liquors are issued in the United Kingdom. The system dates from 1552, prior to which the sale in alehouses and inns was free, subject to certain municipal regulations. The Licensing System was established in the reign of Edward VI., to check the evils flowing from the open system; but the anticipated benefits were only partially realised, owing to the non-compliance by the justices generally with the spirit of the Act, requiring them to close houses which were the cause of social abuses. The Licensing System gives to

justices power to grant or refuse licenses for the sale of intoxicating liquors on and off the premises; and their discretion is absolute, except in the case of beerhouse licenses first taken out before 1869, and in the case of off-licenses for wine and spirits, in regard to which justices have only to satisfy themselves that certain statutory conditions are complied with. Wholesale dealers' licenses are taken out direct from the Excise. The Brewsters or Licensing Sessions are held in Middlesex and Surrey in March and April, and in the rest of England and Wales in August and September. Every license is for one year only, and though it is usual to speak of licenses being "renewed," every holder of a license has to take out a new license, which dates from the time when the previous license expired. Many changes have been introduced into the Licensing System since its origin in 1552, various experiments in the direction of free trade having been made and abandoned; but the demand for a reform of the system is now chiefly in respect to such an alteration in the licensing authority as would substitute, in whole or part, some other body for the justices. It is proposed by some to transfer the licensing powers of the justices to representative bodies dealing with other local affairs; and by others to transfer them to elected boards, having only this subject to consider and decide. See LOCAL OPTION.

Lichenstein, Prince. See AUSTRIAN POLITICAL PARTIES.

Lichfield, Thomas George Anson, 2nd Earl of (creat. 1831); was b. 1825, and succeeded his father 1864. The 1st Lord Anson was the celebrated Admiral.

Lichfield, Rt. Rev. William Dalrymple MacLagan, D.D., 92nd Bishop of (founded 656), son of David MacLagan, Esq., M.D., physician to the forces, who served with distinction in the Peninsular war. Was b. 1826, and was consecrated Bishop of Lichfield 1878.

Liddell, Sir Adolphus Frederick Octavius, K.C.B., Q.C., Permanent Under-Secretary of State for the Home Department, d. June 28th, 1885; was b. 1818. Called to the bar at the Inner Temple (1844), and appointed Queen's Counsel (1861).

Liddon, Rev. Henry Parry, D.D., D.C.L., Canon of St. Paul's, was b. 1829. Educated at Ch. Ch., Oxford, where he graduated B.A. (1850), and (1851) obtained the Johnson Theological Scholarship; M.A. (1853). Vice-Principal of the Theological College at Cuddesdon, in the Diocese of Oxford (1854-59). Examining Chaplain to the late Bishop of Salisbury. Prebendary in Salisbury Cathedral (1864). Bampton Lecturer (1866), his subject being on "The Divinity of Jesus Christ." Canon Residentiary of St. Paul's Cathedral (1870). Ireland Professor of the Exegesis of Scripture in the University of Oxford (1870), that University conferring upon him the degree of D.D., D.C.L. Canon Liddon is one of the most prominent and distinguished members of the High Church party; his Easter sermon (1885) having emphasized his position as the leading exponent of that School at the present time. Canon Liddon is a very popular preacher, and when in residence his discourses always attract large congregations to St. Paul's. In addition to numerous sermons published, Canon Liddon is the author of several important theological works.

Liebknecht, Herr. See GERMAN POLITICAL PARTIES.

Lifford, James Hewitt, 4th Visct. (creat. 1781); was b. 1811, and succeeded his father in the title 1855. Irish representative peer. The 1st peer was a distinguished lawyer, and (1767) was appointed Lord High Chancellor of Ireland.

Light. The origin of light is now explained on the **undulatory theory**, the fundamental principles of which are due to Huyghens and Euler. On this theory, all space is filled with an elastic medium termed ether, by means of which the vibrations produced by a luminous body are propagated in a series of waves, which in their turn act on the retina, and so produce the sensation of vision. This method of transmission may be compared with the way in which a wave can be caused to pass along a rope, by shaking it at one end. The **emission theory**, chiefly developed by Newton, accounted for the propagation of light by the translation of particles of light thrown forth from a luminous body in all directions. The undulatory theory, in its mathematical development by Stokes and others, explains the phenomena of fluorescence and double refraction (polarisation), which the emission theory failed to do satisfactorily. The **velocity of light** has been determined by Romer Foucault, Fizeau, Cornu, and others, to be about 190,000 miles per second, consequently the light from the nearest star requires $\frac{3}{4}$ years to reach us. (For the laws of reflection and refraction of light, see numerous text-books.)

Li Hung-Chang, General, one of the most intelligent and enlightened Chinese of the present age, was b. 1823, in the province of Anu-Huei. Became Imperial Secretary (1830). Commanded the royal troops against the rebels, whom he defeated (1863 and 1867). Governor of the Thiang-Sin Province, and afterwards created Viceroy of the United Countries (1865); Minister Plenipotentiary (1866); Viceroy of Hong Kuang (1867); Grand Chancellor (1868). In 1870 he was disgraced for not having suppressed a rebellion, but was (1872) restored to his former honours and position. Li Hung Chang is known as a friend to foreigners and to European culture and industry, and obtained much distinction for his successful negotiations with the United States on the occasion of the murder of Mr. Margery.

Lilford, Thomas Lyttelton Powys, 4th Baron (creat. 1797), was b. 1833, and succeeded his father 1861.

Limerick, William Hale John Charles Pery, 3rd Earl of (creat. 1803); Baron Foxford (1815), by which title he holds his seat in the House of Lords; b. in New South Wales 1840, and succeeded his father 1866.

Limitations, Statutes of. These statutes limit the time within which a man may seek redress for an injury he has sustained. Lapse of time will not protect any one who has ever committed a crime from being prosecuted for it. Redress from a trustee for a breach of trust may always be had, however long the interval since its commission. But with this exception the remedy for any civil injury may be barred by lapse of time. An action of debt or covenant, if founded on a deed, must be brought within 20 years of breach; if founded on any less formal agreement, within 6 years of breach. An action to recover land must be brought

within 12 years after the right to bring it first accrued. Should the right have accrued to a person under disability, as an infant or lunatic, an action may be brought within 12 years of its accruing, or within 6 years of the disability ending or the disabled person dying, but in no case of disability are more than 30 years to be allowed altogether. The above term of 12 years applies also to an action brought by a mortgagor to recover possession of his land, and to an action brought to recover money charged upon land by mortgage or otherwise. Only such arrears of rent as have accrued within 6 years before bringing an action for them can be recovered. Actions of trespass to goods, of assault, battery, wounding or imprisonment, must be brought within 4 years of the time when the injury was committed; actions for slander being limited to 2 years. Actions on penal statutes, if brought by the party aggrieved, are limited to 2 years; if brought by a common informer, are limited to 1 year. The lapse of 60 years bars actions for the recovery of real property, when brought by the Crown against a subject. The remedy in all the above cases may be lost by the lapse of time, but the right survives and may sometimes be made available in other ways than by action. Formal acknowledgment of a right by the person to whom it is adverse will render of no effect any lapse of time which has taken place, but time will run afresh from the acknowledgment. The law upon this subject is very complex and difficult. (See Banning on the "Limitation of Actions.")

"Limner, Luke." See NOMS DE PLUME.

Lincoln Meeting and Lincolnshire Handicap. See RACING.

Lincoln, The Right Rev. Edward King, D.D., the new Bishop of (founded 1067), was b. 1829; son of the late Ven. Archdeacon King. Educated at Oriel Coll., Oxford, where he graduated B.A. (1851), M.A. (1855). Chaplain and Lecturer at Cuddesdon College, under Bishop Wilberforce, and Principal of that College (1863-73); Regius Professor of Pastoral Theology in the University of Oxford, and a Canon of Christ Church Cathedral (1873); appointed to the see of Lincoln (1885).

Linocrusta Walton. A preparation of linseed oil and fibre rolled on to a fabric and subjected to the pressure of machinery, which stamps out the various designs as desired in greater or less relief. It is used for the coverings of walls, as frieze, filling, or dado; and being made in four different colours it permits of great variety both of design and tint. It is claimed for this process that not only does it adapt itself by its plastic nature to artistic manipulation, but possesses in its imperviousness to damp sanitary qualities of a high order. Originally known as **Linoleum Muralis**, at the present time it is called **Linocrusta Walton** (*linum*, wax, and *crusta*, relief). The name of the inventor is Mr. Frederick Walton, of 9, Berners Street, W.

Lindsay, John Trotter Bethune, 10th Earl of (creat. 1633); b. 1827, and succeeded his father 1851. Scotch representative peer.

Lindsey, Montagu Peregrine Bertie, 11th Earl of (creat. 1626), b. 1815, and succeeded his brother 1877. The 1st Earl was Lord Great Chamberlain of England. In the 11th of Charles I. he was Lord High Admiral of England, and he fell in the Royal cause at the battle of Edgehill.

Lingen, Ralph Robert Wheeler Lingen, 1st Baron (creat. 1885); b. 1819. Was Secretary to the Committee of Council on Education (1849-69), and Permanent Secretary to the Treasury (1869-85).

Linoleum Muralis. See LINCRUSTA WALTON.

"Lion Sermon." Preached annually on Oct. 16th at the church of St. Catherine Cree, Leadenhall Street, to commemorate the escape of Sir John Gayer, a wealthy merchant of London in the reign of James I., from a ferocious lion. On his return to England the grateful knight bequeathed £300 to his parish church for the relief of the poor, on condition that a sermon should be annually preached in memory of his extraordinary deliverance. The date of the first sermon is given as 1647.

Liquid Fuel. Petroleum refuse, or other waste oil, injected into furnaces in a pulverised form mixed with steam and used instead of coal. The abundance of coal and wood in western Europe has been inimical to its employment in our own and neighbouring lands, but it is the sole fuel used in the Caspian region, where coal cannot be had for less than £5 a ton. The enormous petroleum supply at Baku, and the deposits on the east coast of the Caspian, furnish inexhaustible quantities of waste oil. Numerous efforts were made to construct a furnace to burn it, but none were successful until a vessel was fitted in 1869 with one combining the inventions of Aydon, an Englishman, and Shapkovsky, a Russian. Other inventions followed, and now liquid fuel is used by over a hundred steamers on the Caspian, several hundred locomotives on the trans-Caucasian, trans-Caspian, and South Russian railways, and by over a thousand stationary engines in various parts of Russia. It possesses the following advantages over coal: emits no smoke, being therefore valuable for cruisers; can be turned on and off like gas, and does away with stokers; one ton affords as much heat as two or three tons of coal, lessening the amount of fuel needed, and at the same time placing a corresponding amount of space at the disposal of the owner for cargo purposes; dispenses with the dirty process of coaling, so disagreeable to passengers, and is less liable to give forth inflammable and explosive gas in the bunkers.

Lismore, George Ponsonby O'Callaghan, 2nd Visct. (creat. 1806); sits in the House of Lords by the title of Baron Lismore; b. 1815, and succeeded his father 1857.

Lister, Mr. S. C. See SILK MANUFACTURES, and WASTE MATERIALS, UTILISATION OF.

Listowel, William Hare, 3rd Earl of (creat. 1822), sitting in the House of Lords as Baron Hare; b. 1833, and succeeded his father 1856. Was captain in the Scots Fusilier Guards, and severely wounded at the battle of the Alma. Was Lord-in-waiting to the Queen (May to Sept. 1880). The 1st peer represented Cork and Athy in the Irish Parliament.

Liszt, Franz. Renowned pianist, b. 1811, at Raiding, in Hungary. His father was a musician. By the kindness of some amateurs Liszt was sent to Czerny, at Vienna, and there became a friend of Schubert. He sought admission to the Paris Conservatoire, but was refused by Cherubini as a foreigner. He became celebrated in Paris, and occasionally visited England. In 1849 he accepted the post of Director of the Court Theatre at Weimar. Here he produced Wag-

ner's great operas, then quite unknown, as well as the stage music of Berlioz, Schumann, and Schubert. Weimar became the headquarters of Europe for progressive musicians, and the nickname "**The School of the Future**" soon attached itself to them. In 1859 Liszt ceased his great work at Weimar. Since then he has devoted himself to composition. At first he wrote largely for the pianoforte, but he has since devoted himself chiefly to orchestral and vocal music. Madame Richard Wagner (Cosima) is a daughter of Liszt. Late in life he took orders, and strictly is now the Abbé Liszt. Von Bülow was one of his pupils. The Abbé Liszt is shortly about to revisit England (in April 1886).

Literary Men Deceased (1885-March 1886). See OBITUARY (APPENDIX).

Live Animals, Imports of. See MEAT SUPPLY.

Liver Friendly Society, The. See FIRE AND LIFE INSURANCE.

Liverpool, Rt. Rev. John Charles Ryle, D.D., 1st Bishop of (founded 1880), eldest son of the late John Ryle, Esq., M.P., of Macclesfield, b. 1816. Was educated at Eton, and at Christ Church, Oxford; graduating (1836) Craven Scholar and first-class Classics. Rector of Helmingham (1844-61); vicar of Stradbroke (1861-80); appointed Bishop of Liverpool by Lord Beaconsfield (1880). Author of "**Christian Leaders a Hundred Years Ago**," and other works. Bishop Ryle is the leading prelate of the Evangelical Party.

Liverpool Steeplechases. See RACING.

Livesey, Joseph, a self-educated man, known as the "**Father of Teetotalism**" (q.v.), because on September 1st, 1832, he drew up the first pledge of total abstinence from all intoxicating liquors, which was signed by himself and six others, historically known as "**The Seven Men of Preston**." Born at Walton, near Preston, March 5th, 1794, he lived in deep poverty, not being able to afford the cost of a candle with which to learn to read after his day's work as a hand-loom cloth-weaver. In 1816, removing to Preston, he commenced business as cheese dealer. In 1831-2-3 he published the *Moral Reformer* (6d. monthly); in 1834-5-6-7 the *Temperance Advocate* (1d. monthly), the first exclusively teetotal periodical; and in 1842 till the Repeal of the Corn Laws in 1846, *The Struggle* (4d.), which contained 378 engravings, and reached a circulation of 15,000 weekly. In 1844 he established the *Preston Guardian* as a vigorous Anti-Corn-Law paper, with which he was connected as editor and publisher for fourteen years; and in 1867-8 he issued the *Staunch Teetotaler*. He was a prolific writer, and foremost in every philanthropic work in Preston, moral, social, and political reforms having in him a warm advocate. His writings on temperance were largely confined to tracts and handbills. Nearly 3,000,000 copies of his celebrated "**Malt Liquor Lecture**" have been issued. His opinions were always in advance of his day. He was an ardent Corn Law repealer ten years before Cobden and Bright. His cash contributions in furtherance of teetotalism exceeded £7,000, nearly all of which was expended in publishing, he being a firm believer in the power of the press. He filled nearly every public office in Preston, was the founder of the Mechanics' Institute in that

town, as well as of other associations for the benefit of the people. He died on Sept. 2nd, 1884, aged 90, his funeral being attended by 10,000 persons, even the blinds of the public-houses being pulled down as the cortege passed. [Consult "Life and Labours of Joseph Livesey" (1885), National Temperance Publication Depot, 337, Strand, London, W.C.]

Llandaff, Rt. Rev. Richard Lewis, D.D., 93rd Bishop of (founded before 522), son of John Lewis, Esq., of Henllan Narberth, co. Pembroke, was b. 1821. Educated at Haverfordwest Gram. School, and Worcester Coll., Oxford. Consecrated to this see in 1883.

"**L. L. E.**" See NOMS DE PLUME.

Llewellyn, Mr. Evan Henry, M.P., fourth son of Mr. L. Llewellyn, of Buckland Filleigh, North Devon, was b. 1847. He is a Deputy Lieutenant of the county of Somerset, and Chairman of the Axbridge Board of Guardians. Returned in the Conservative interest as member for North Somersetshire (1885).

Lloyd, Mr. Wilson, M.P., of Myvod House, Wednesbury. Educated at York. He is proprietor of the Bescot Forge Ironworks and Chairman of the Employers' Liability Insurance Co., Birmingham. J.P. for Staffordshire. Returned in the Conservative interest as member for Wednesbury (1885).

Lloyd's Clauses. See MARINE INSURANCE.

"**Lloyd's Weekly London Newspaper**" (*id.*), founded Nov. 1842, is the exponent of advanced Liberal principles. It gives the latest telegrams and news, and contains much information of literary and general interest.

Load Line Committee. See SHIPPING AND SHIP-BUILDING.

Lobatschewski. See FOURTH DIMENSION.

Local County Government. For more than thirty years bills have been brought forward in the House of Commons by private members dealing with reformed administration in the counties; but up to the present none of the projects have reached the dignity of an Act of Parliament. Three bills were introduced by **Mr. Milner-Gibson**, in the years 1850, 1861, and 1868. **Mr. Gibson's** first proposal was that the County Board should consist partly of ratepayers, to be elected by boards of guardians, and partly of magistrates, to be elected at quarter sessions. In the third bill he proposed that the whole Board should be elected by the boards of guardians, with a qualification of £30 rateable value. In 1860 **Sir John Trelawny**, in 1868 **Mr. Wyld**, and in 1869 **Mr. Knatchbull-Hugessen**, introduced bills on the subject, but without any result save the ventilation of the subject. In 1871 **Mr. Goschen** brought forward a scheme, the principal features of which were the consolidation of rates and the establishment of parish boards, the chairmen of which were to elect from among themselves a certain number of parochial representatives for each petty sessional division. The chairmen were to have a £40 qualification, and the magistrates in quarter sessions were to elect from among themselves a number of members equivalent to the total number of parochial representatives. Some years after, **Mr. Solater-Booth** brought in a bill, which was debated at great length in the House of Commons, but it never became law. The bill proposed to give each petty sessional division two magistrates chosen at quarter sessions, and

two members elected by the guardians from among persons qualified to be guardians. In 1879 another scheme was brought forward, which provided that one-third of the County Board should consist of magistrates to be chosen at quarter sessions, and two-thirds chosen by guardians from among those qualified to be guardians. **Mr. Gladstone's** administration of 1880 had the matter frequently under consideration, and **Sir Charles Dilke** had a complete measure drafted. But the pressure of other business prevented its being brought forward. The bill, however, was known to be based on broader and more popular lines than any of its predecessors, and gave wide scope to the Board in all matters affecting the county. It is understood that the bill which was being prepared by the late Conservative Government, while adopting some of **Sir Charles Dilke's** proposals, proposed also to revert to certain suggestions contained in **Mr. Solater-Booth's** bill. The new bill was understood to be regarded by that Government as sufficiently wide to cover all the demands of moderate Irishmen—as, in fact, a reasonable solution of the Home Rule difficulty. This question is now (March 27th, 1886) left to **Mr. Gladstone's** administration to deal with.

Local Government Board, The. The old Poor Law Board was abolished in 1871, and was, together with the General Board of Health, replaced by the Local Government Board, a Committee of the Privy Council. It is nominally under the charge of a Crown-appointed President, the President of the Council, the chief Secretaries of State, the Lord Privy Seal, and the Chancellor of the Exchequer, though the work of the Board practically rests with the President and his clerks. The duties include the supervision and control of sanitary matters, questions of local government and municipal improvements, and the keeping of highways; and the Board has further to report upon private bills (34 and 35 Vict., c. 70). See ASYLUMS BOARD (METROPOLIS).

Local Option. This phrase is now applied to such legislation as would enable the inhabitants of districts to reduce or extinguish the sale of intoxicating liquors in their own midst. The Local Option resolution was first moved by **Sir Wilfrid Lawson** on March 11th, 1879, and again on March 5th, 1880, being rejected by majorities of 88 and 114. But on June 18th, 1880, he again brought it on in the Parliament recently elected, and it was carried by a majority of 29. In 1881 another motion was carried by 42 majority, and a third motion in 1883 by a majority of 87. There has yet been no legislation on the subject, but it is believed that some means will be adopted before long by which the issue or renewal of licenses will be put under the power of localities. There are several schemes of Local Option seeking to effect a reform in the licensing system, but **Sir W. Lawson** and the United Kingdom Alliance are only desirous of a power of direct veto, by which the electors of any place might veto, if so pleased, the issue of all licenses for the sale of liquor, and thus stop among themselves the sale of strong drink with its attendant evils. The phrase "Local Option" is borrowed from a letter by **Mr. Gladstone** in 1868, when, writing on the subject of the Permissive Bill, he said that he was disposed to "let in the principle of local option wherever it is found

satisfactory." The charge of vagueness advanced against Local Option is baseless. The principle—that of local jurisdiction over the liquor traffic—is clear and exact enough, though the applications of the principle may be exceedingly various.

Local Option, Alphabetical List of M.P.s in favour of. See APPENDIX.

Local or Contact Metamorphism. See METAMORPHISM.

"Lock out." See TRADES UNION.

Lockroy, M. Edouard. A Radical deputy in the French Chamber, who, on the fall of the Brisson Ministry at the end of 1885, accepted the portfolio of Commerce in the new Government formed by M. de Freycinet. M. Lockroy had long been known in the political world—mainly, however, as a journalist and contributor to the *Rappel*. He is or was a free trader, and his appointment excited perhaps more interest than that of any of his colleagues. It was further remarkable that on his accession to office the name of his department was changed to that of "Commerce and Industry," matters especially affecting the working classes being transferred from the Ministry of the Interior. He is described as a fluent speaker, and though identified with the Radical party and its organ, he took an independent course when voting for the Tonquin credits. At the general election in October 1885 his name appeared on both the Radical and the Opportunist lists for the Department of the Seine, and he was returned at the head of the poll, being described as the *premier élu de Paris*. It is stated that M. de Freycinet had to abandon his desire to secure the services of another deputy, M. de Fallières, in order to secure M. Lockroy, and therefore the latter's selection was looked upon as a concession to the Radical party, for the sake of securing the stability of the cabinet. M. Lockroy married the widow of the son of Victor Hugo, and it is added, "the Lockroys and Hugos formed one household." The journal to which he contributed, too, is edited by M. Vacquerie, whose brother married Victor Hugo's daughter; and in fact the paper itself passed as the organ of the great French poet. From his previous associations, and the attention directed to the circumstances of his appointment, great things were expected from M. Lockroy when he assumed office, both by the advanced party in France and their sympathisers abroad. It may be added that in his early days his sentiments led him to join Garibaldi in his Sicilian expedition, and that now he is a well known figure in Parisian society, though, as seen above, as politically Radical as ever.

Lockwood, Mr. Frank, Q.C., M.P., was b. 1846. Educated at Cambridge. Called to the bar (1872) at Lincoln's Inn; Q.C. (1882). Was one of the Royal Commissioners appointed to inquire into corrupt practices at Chester (1880). Appointed Recorder of Sheffield (1874). Returned in the Liberal interest as member for York (1885).

Locock, Sidney, Envoy Extraordinary and Minister Plenipotentiary to Brazil, d. Aug. 30th, 1885. He was a son of the distinguished physician, and was b. 1834. He entered the Diplomatic Service (1853), was appointed Second Secretary at the Hague (1862), and promoted to be Secretary of Lega-

tion in Japan (1865). He was Secretary of Embassy at Constantinople (1872), and Acting Chargé d'Affaires there from January till May 1874, when he was nominated Minister Resident and Consul-General to the Republics of Guatemala, Costa Rica, Honduras, Nicaragua, and San Salvador. In 1881 he was appointed Minister Resident in Servia.

Loddon. See VICTORIA.

Lodgers' Goods Protection Act, 1871. This Act provides that if a superior landlord levy a distress on the goods and chattels of a lodger for arrears of rent due to him from his immediate tenant, the lodger may serve the superior landlord, or any person employed to levy the distress, with a declaration setting forth that the immediate tenant has no beneficial interest in such goods and chattels, and stating how much rent, if any, is due from the lodger to the immediate tenant, his immediate landlord, and may pay the superior landlord any sum so due. If thereupon the landlord or any other person employed by him persist in levying the distress, he is guilty of an illegal distress, and the lodger may recover the goods by application to a stipendiary magistrate or two justices. The declaration above mentioned must be accompanied by an inventory of the goods to which it refers, and a deliberate falsehood in either makes the lodger liable for a misdemeanour. Any payment made to the superior landlord in pursuance of this Act is a valid payment on account of rent due to the immediate landlord.

Loftus, Baron. See ELY.

Logographic Printing. A system invented by a compositor, **Henry Johnson**, about 1785, whereby the types were common whole words and syllables instead of single letters. It was originally employed for printing *The Times*, but did not prove successful.

Lomakin, General. See GEORGE TEPÉ.

Lombe, Sir Thomas. See SILK MANUFACTURES.

Lome, M. Dupuy de. See BALLOONING.

Lomé. See TOGO-LAND.

Londesborough, William Henry Forester Denison, 2nd Baron (creat. 1850), was b. 1834, and succeeded his father 1860. Was M.P. for Beverley (April 1857 to May 1859), and for Scarborough (May 1859 to Jan. 1860).

London Ballad Concerts. See MUSIC FOR 1885.

London, Rt. Hon. and Rt. Rev. Frederick Temple, D.D., P.C., 108th Bishop of (founded 609), son of the late Major Octavius Temple, Lieut.-Governor of Sierra Leone, b. 1821. Formerly head master of Rugby; Bishop of Exeter (1869-75), and translated to the see of London (1885).

London Bridge, New. See ENGINEERING.

London Congregational Union. This, the only society representing the interests of London Congregationalists, was formed in March 1873. During its existence it has exercised a great influence on the London churches of the Congregational order. Its constitution defines the limits of its operations as within the area known as Greater London, comprising the whole of Middlesex, and such portions of Surrey, Kent, Essex, and Herts as are within twelve miles of Charing Cross. With very few exceptions, all the Metropolitan Congregational churches are affiliated with the London Union. The objects of the Union are to promote spiritual

intercommunion between the Congregational Churches of the Metropolis, to aid such of them as are weak, to secure the planting of new churches where these seem to be required, to assist churches in adapting their provisions and methods to the altered positions of districts in which they are located, to facilitate the expression of their opinions upon religious and social questions, and in general to advance their common interests and to promote the evangelisation of the people. An annual average of about £3,500 is expended in aiding churches to support their ministers and in extending and consolidating mission work. About £7,000 has been spent during the last six years in promoting evangelistic work in the rural districts. The membership of the Union consists of the representatives of affiliated churches and of ministerial, personal and honorary members. The representative members are the pastors of affiliated churches who have been duly received into the Union, and delegates from such churches in the proportion of one to every twenty-five church members; ministerial members are the ministers of unaffiliated churches, ministers without pastoral charge, and also the professors and secretaries of Congregational colleges and associations. Subscribing members of affiliated churches may become personal members. Retired ministers, professors of colleges, and secretaries of religious associations are eligible for election as honorary members. The general committee consists of forty members; ten members retire annually, and these are not eligible for reappointment before the following annual election. The area of the Union is divided into ten districts—viz., Central, North, North-East, East, West, North-West, Metropolitan Essex, Metropolitan Kent, Metropolitan Surrey, and ex-Metropolitan Surrey. The pastors and delegates of the affiliated churches in these districts elect their own district committees. The duties of these district committees are to aid, or act for, the general committee in carrying out the general objects of the Union in their respective districts, to advise upon all questions which may arise with regard to the eligibility of the churches within their bounds, for connection with the Union, to consider and report on applications for aid and on proposals for church extension, and to inform the general committee of any openings which may arise for church extension. In 1883 a **Church Extension Committee** was formed, having for its special objects the providing of additional religious accommodation in the metropolis. A sum of £66,500 has been raised by this committee during the two years of its existence.

Londonderry, Charles Stewart Vane-Tempest-Stewart, 6th Marq. of (creat. 1816); Earl Vane, Visct. Seaham, Baron Stewart, by which last three titles he holds his seat in the House of Lords; was b. 1852, and succeeded his father 1884. Was M.P. for co. Down (1878-84). The 2nd peer, long known as Visct. Castlereagh, was a distinguished minister; the 3rd was a General officer who served in the Peninsula, and was ambassador to Vienna, etc.

"London Gazette." The. Originally a two-paged bi-weekly journal—founded in 1642, and removed in 1665 to Oxford, whither the court had retired to escape from the contagion of the plague, and whence the first extant series was issued—it is the official organ for all public announcements, and is now published weekly. It is the property of the Government, and all

bankruptcies, partnerships, etc., must be advertised in it. At the time of the **great railway mania** (1846), when companies were being proposed and promoted on every side, the prospectuses of which had to be advertised in the *Gazette*, it was issued for one month as a daily paper, and the appended particulars of the number of pages it contained during that period are interesting as a register of the rise, crisis, and collapse of the fever:—

Date.	Pages.	Date.	Pages.
Nov. 6	72	Nov. 19	183
" 7	55	" 20	191
" 8	71	" 21	231
" 10	127	" 22	287
" 11	87	" 24	127
" 12	127	" 25	143
" 13	104	" 26	127
" 14	190	" 27	153
" 15	*583	" 28	207
" 17	175	" 29	295
" 18	88	Dec. 1	39

London Government Bill, 1884. A Bill designed to bring the whole metropolis under a single municipal government, similar to that existing in the present municipal boroughs. The new City of London was to comprise the area now subject to the Metropolitan Board of Works. The new corporation of London was to have all the powers and duties of the present corporation of the City, and other City authorities, as well as of the Board of Works, vestries, district boards, and other administrative authorities in the Metropolis. It was also to have within the Metropolis the administrative powers of the justices of Kent, Middlesex, and Surrey. It was to act by a common council of 240 members, and a Lord Mayor to be elected annually by them. Aldermen were to be abolished. The present City of London and the Metropolitan parishes and districts were to become municipal districts electing each a certain number of common councillors. Each district was to be divided into wards, and each ward was to elect a certain number of district councillors. The district councillors, together with the common councillors elected by the district, were to form the district council, which was to take the place of the Commissioners of Sewers in the City, and of the vestries and district boards elsewhere. The qualification of a citizen was to be the same as in other municipal boroughs, with the exception that residence within 15 miles was to have the effect of residence within 7 miles elsewhere. Any citizen was to be qualified for election as a town councillor, but in order to be qualified for election as a district councillor he was to hold his qualification in the particular district, although not necessarily in the particular ward. The whole of the receipts of the present corporation were to be paid into a city fund, and deficiencies were to be made good out of a city rate assessed upon the whole area of London, and levied in much the same way as the vestry and district board rates are levied now. Certain charges were to be made local, especially the sum expended by any district council. This was to be fixed by an estimate

* This number was printed on 145 sheets, so that each copy required 145 stamps (12s. 1d.), yet the selling price (2s. 8d.) was unaltered. —For the year ending March 31st, 1885, the income derived from it was £17,891.

submitted by each district council and approved by the common council. All charters, prescriptions, customs, and rights were to be saved, except in so far as they were inconsistent with the Bill. A large part of Middlesex, and parts of Kent and Surrey, were to have been transferred to the county of the new City of London; and London was to have had, like other counties, a recorder holding quarter sessions, a bench of borough magistrates, paid magistrates and coroners. The Central Criminal Court was to be reconstituted by repealing the present obligation to include in the commission the mayor, aldermen, etc., and by including the deputy recorders. For purposes of criminal and civil justice London and Middlesex were to form one county. The Militia Acts for England were to be extended to all parts of the new City. This Bill was dropped by the Government which introduced it. The pressure of public business was great, and a formidable opposition was expected.

London International College, The. In 1861 Monsieur A. Barbier placed at the disposition of the Imperial Commission of the French Government, a sum of 5,000 francs, to be awarded in four prizes by an international jury at the great Exhibition of London in 1862. As a result, an International Education Society was formed in the beginning of 1864, among the English subscribers being Richard Cobden and many of his personal friends, including Mr. A. W. Paulton, Dr. W. B. Hodgson, and others. The original intention was to build at least four colleges, in England, France, Germany and Italy respectively, between which an exchange of pupils should take place according to certain regulations. A beginning was made in England; and Dr. L. Schmitz, then rector of the high school at Edinburgh, was chosen as the first head-master; and in 1867 a large college was built at Spring Grove, near Isleworth, and on July 20th, 1867, it was formally opened by H.R.H. the Prince of Wales. Arrangements were made with colleges already established abroad; but the original idea was never carried out, and in 1874, on the resignation of Dr. Schmitz, the Society was re-organised and established by Act of Parliament as an English public school, special attention being given to modern languages, under the name of the London International College. Mr. H. R. Ladell, M.A., the successor to Dr. Schmitz, is the present head-master.

London Temperance Hospital. The provisional committee for securing funds and premises for a Temperance Hospital was appointed in February 1871, and on October 3rd, 1873, an inaugural meeting was held at 112, Gower Street, into which the first patient was admitted October 6th. Here only 17 in-patients could be admitted at one time, but in 1881 a spacious building in the Hampstead Road for the reception of 54 in-patients was opened by the Lord Mayor of London (Sir W. McArthur); since which time another section has been erected, so that the hospital can now accommodate at once upwards of 120 patients. There is also an out-patients' department, where more than 3000 new patients are treated annually. Down to April 30th, 1885, the number of in-patients had been 2,862, and out-patients 19,538. The deaths had been 142—a mortality of only 5 per cent. This hospital exists for the treatment of medical and surgical cases without alcohol; but though alcohol may be given in

"exceptional cases," under strict conditions, only two cases of the kind have occurred, and in neither case was the patient benefited. Not a few exceedingly serious and remarkable cases have been successfully treated; and the proof afforded of the possibility of rapid recovery from diseases in which alcohol has been supposed to be either necessary or of great value, has done much to facilitate the reduction of the use of alcohol in similar institutions, and so encourage its entire exclusion. Nearly £50,000 has been received for purchase and building purposes, and the annual income now required is about £5,000. President, Mr. Samuel Morley; chairman, Mr. T. Cash; treasurer, Mr. J. Hughes; and hon. sec., Rev. Dawson Burns. The visiting physicians are—Dr. J. Edmunds, Dr. R. J. Lee, and Dr. J. J. Ridge. The visiting surgeon is Mr. A. Pearce Gould, M.S.

London University and Women's Rights. See WOMEN'S RIGHTS.

London Water Supply. One of the great problems to be solved in the almost immediate future in ever-increasing London is that of its water supply. The metropolis, in this respect, is well known to be very far behind the great provincial towns in the north. It is said that the furthest advancement made as yet with regard to water is a general acknowledgment that the present supply is very unsatisfactory, and that something ought to be done. The Metropolitan Board of Works, independently of subsidiary measures, has to administer between eighty and ninety Acts of Parliament, and will scarcely find time to add to its functions labours of such magnitude as the water supply to 4,000,000 of persons. The Corporation of London at a very early date missed an opportunity of acting in the interests of the ratepayers by obtaining the control of the supply. In 1606 they were empowered by Act of Parliament to bring water to the City from Ware and its neighbourhood; and by far the richest of the water corporations—the New River Company—originated out of this measure. Sir Hugh Myddelton, however, was the founder of the Company, and to him the municipality resigned their rights. They hesitated to speculate, probably from a desire not to venture with public money in an enterprise which in the end was only saved from ruin and disaster by special countenance and assistance from the Crown itself. Passing on, nearer to our own time, in the early years of the present century several water companies entered into fierce competition, the pipes belonging to them intersecting each other in the same streets. These companies obtained the necessary powers for their work, the corporation, "then the only public body of any note in London," looking on, altogether oblivious of the interests of the citizens they were constituted to protect. This nuisance, the effect of which was to render some of the streets quite unfit for traffic, was succeeded by a coalition of the companies. Then followed an attempt to extort from householders enormously high prices for water, with the object of making good the losses previously sustained. In these circumstances, it might have been thought, the corporation, or some of the smaller bodies, would have moved; but they did not, and the public, irritated beyond bearing, made an appeal to parliament direct. A committee of the House of Commons, in 1821, inquired into

the grievances laid before them, and it may be said that the question of "water supply to the Metropolis" has been before parliament ever since, in one way or another; and although the proceedings have caused the expenditure of enormous sums of money, very little advantage to consumers resulted until recent legislation. The Metropolitan Board of Works was formed in 1855, "to supervise the drainage of London, and to perform certain functions with regard to its streets and buildings." This Board has from time to time appealed to parliament for powers with respect to water. Power was asked in 1871 to buy up the undertakings, and in 1878 to furnish an independent supply. Parliament, however, did not favour these schemes, but the board were empowered to compel the substitution of a constant supply in lieu of the storage in cisterns; but it is widely known that no movement whatever was made in this direction by the vestry representatives sitting in Spring Gardens; and, therefore, wherever the benefit of the constant supply system has been conferred the water companies alone deserve the credit for it. The fate of Sir Richard Cross's attempt to relieve the Metropolis from its difficulties in regard to water is matter of history. Apart, however, from the actual question of supply, constant or otherwise, an attack made upon the excessive charges by assessment which had for many years been imposed upon consumers, has, thanks to the battles fought by **Mr. Archibald Dobbs** in the law courts, and subsequent legislation, been successful. After proceedings the history of which will be fresh in the minds of those directly interested, Mr. Dobbs made an appeal to the House of Lords from the judgment of Lords Coleridge, Baggallay, and Lindley, in the Court of Appeal. The case raised the question as to the basis on which the water companies of the Metropolis were entitled to assess their rates upon the occupiers of houses in their respective districts. The respondents (the Grand Junction Water Company) claimed a right to rate the appellant upon the "gross annual value" at No. 34, Westbourne Park, Paddington; but appellant's contention was that he was only entitled to be charged on the "net annual value." He held the premises for a term of ninety-seven years at a ground rent of £15, the lease containing, amongst other covenants, one by the lessee to repair and insure. The rights and privileges of the respondents were controlled by the Act 7 George IV., chap. cxi., among other acts. By the 27th section of that Act it is provided that the rate to be levied by the company shall be payable "according to the actual amount of the rent where the same can be ascertained, and when the same cannot be ascertained according to the actual value to which the assessment to the poor rate is computed in the parish or district where the house is situated." By the Act 15 and 16 Vict., chap. clvii., it was provided that the company should be entitled to levy a rate upon the annual value of the houses they supplied. By section 4 of the Valuation (Metropolis) Act, 1869 (32 and 33 Vict., chap. 67) the terms "gross value" and "rateable value" are defined—"gross value" meaning the annual rent which a tenant might reasonably be expected to pay for a hereditament, if he undertook to pay all tenants' rates and taxes, and tithe. The term "rateable value"

means gross value, after deducting therefrom the probable average cost of repairs, insurance, and other expenses. The gross value and the rateable value of appellant's premises, as appearing in the valuation list in force for the time being, were £140 and £118 respectively. The respondents claimed a right to charge the appellant for water supplied by them for domestic purposes at the rate of £4 per cent. upon the gross value of £140, the contention on the other side being that the charge should be made on £118. The case was referred to the decision of a magistrate at the Marylebone Police-court, who decided in favour of the company. He, however, granted a special case for the opinion of the Queen's Bench Division, upon the question of law as to whether he was right in deciding that section 46 of the Act 15 and 16 Vict., chap. clvii., was applicable, and that the "gross value," as interpreted by the Valuation (Metropolis) Act, 1869, was the proper basis of account; or whether he should have decided that such basis should be the rateable value of the premises. The special case came on for argument in the Queen's Bench Division in March 1882, when the court reversed the decision of the magistrate, holding that the 27th section of George IV., chap. cxi., was not repealed, and that the rent of the premises could not be ascertained, and that upon the proper construction of the section in question, the rate should be based upon the rateable value of the assessment. The Court of Appeal, where the case was then taken, reversed the judgment of the Queen's Bench Division, holding that the 27th section of 7 George IV., chap. cxi., was not repealed, but that upon the construction of such section the rate should be based upon the gross value. The appeal to the Lords was against this latter decision, and judgment was delivered reversing the order of the Court of Appeal and upholding that of the Queen's Bench Division. The moment this final judgment was promulgated, consumers set themselves to work to take advantage of it. In some districts associations were formed, the payment of one shilling to which insured an enormous reduction in the water rate. Rates were tendered on the amount of the parochial assessment, and the associations were successful in compelling the reluctant companies to accept the largely reduced amounts. There were, however, legal technicalities in the way in many cases, and these were removed by the bill brought in by Mr. McCullagh Torrens, and which is now law. At the half-yearly meeting of the Southwark and Vauxhall Water Company, held on Dec. 15th, 1885, Sir H. E. Knight, the chairman, stated that the effect produced by this salutary measure, which has definitely substituted "rateable value" for "annual value," has been that charges and assessments have had to be revised, resulting in the reduction of the income of that Company to the extent of some £9,300. The Metropolitan Board of Works are still moving in the matter of water supply. At a meeting of that body on Dec. 4th last, the parliamentary committee recommended "That the draft of a bill submitted, to extend the operation of the 144th section of the Metropolis Management Act, 1855, so as to enable the Board to submit to parliament a bill dealing with the water supply of London, and also to empower the Board to incur any necessary expenditure in opposing bills relating to the supply of water

in or near the Metropolis, be approved; that when the proper time arrives leave be sought to bring in the bill as a public bill, and that the committee be empowered to take all necessary measures for promoting its passage through both houses of parliament." It was explained that this bill had two objects—first, to empower the Board to incur any necessary expenditure in submitting a measure to Parliament dealing with the whole water supply of London; and second, to incur any necessary outlay in opposing water bills. Whether anything of a settling and beneficial character will be formulated and adopted it is difficult to predict; but it is apparent that whenever an Act is passed for the better government of London, it will have to contain stringent provisions with reference to its supply of water, alike as to its purity and sufficiency, and the rate at which consumers will be called upon to pay for it.

Long, Mr. Walter Hume, M.P., was b. 1854. Educated at Harrow and Christ Church, Oxford. He is Deputy Lieutenant and J.P. for Wilts, and J.P. for Somerset. Returned in the Conservative interest as member for North Wilts (1880-85); East Wilts (1885).

Longford, William Lygon Pakenham, 4th Earl of (creat. 1785), holding his seat in the House of Lords by the title of Baron Silchester, was b. 1819, and succeeded his brother 1860. Served through the Crimean campaign; was Under-Secretary for War (1866-68).

"Longman's Magazine" (monthly, 6d.) founded November 1882; contains serial stories, essays, elementary science, and occasional poetry.

Lonsdale, Hugh Cecil Lowther, 5th Earl of (creat. 1807), was b. 1857, and succeeded his brother 1882. The 1st peer in this family was First Lord of the Treasury (1690). The 2nd earl was summoned to the House of Peers during his father's lifetime, and sat for some years as Lord Lowther; he held successively the offices of a Lord of the Admiralty, a Lord of the Treasury, First Commissioner of Woods and Forests, Vice-President of the Board of Trade, Postmaster-General, also President of the Council, and was for more than thirty years M.P. for Westmoreland and other constituencies.

"Look and Say." See SPELLING REFORM.

Lord Cairns' Act, 1882. See LAND QUESTION, THE.

Lord Chancellor. See PARLIAMENTARY PROCEDURE.

Lord Great Chamberlain. See HOUSE OF LORDS.

Lords, House of. See HOUSE OF LORDS, and POLITICAL PARTIES (ENGLISH).

Lords of Appeal. See HOUSE OF LORDS.

Lords, Privileges of. See PRIVILEGES OF PEERS.

Lords Spiritual and Temporal. See HOUSE OF LORDS.

Loriners, The Worshipful Company of. See CITY GUILDS.

Lorne, The Marquis of, P.C., the eldest son of the Duke of Argyll, was b. 1845. Educated at Eton, and Trin. Coll., Cambridge. Married H.R.H. the Princess Louise. Member for Argyllshire in the Liberal interest (1868-78). Governor-General of Canada (1878). Formerly Lieut.-Col. Argyll and Bute Artillery Volunteers. Is Hon. Col. 10th Lanarkshire Volun-

teers. Lord Lorne is the author of a work on "Imperial Federation."

"Lorrequer, Harry." See NOMS DE PLUME.

Lothian, William Schomberg Robert Kerr, P.C., 9th Marq. of (creat. 1701), holding his seat in the House of Lords by the title of Baron Kerr; b. 1833; succeeded his brother 1870. Was Keeper of the Privy Seal of Scotland (1874). The 4th and 5th Marquises were distinguished military commanders.

"Lot, Parson." See NOMS DE PLUME.

Loudoun, Charles Edward Abney-Hastings, Earl of (creat. 1633), holds his seat in the House of Lords by the titles of Baron de Moleyns and Baron Hastings; b. 1855; succeeded to the title 1874.

Louis I., King of Portugal, b. 1838. He ascended the throne in succession to his brother, Pedro V. (1861). He had attained the rank of captain in the Portuguese navy, in which he had served in his youth as Duke of Oporto. King Louis is a writer of no mean importance; he has translated into Portuguese several plays of Shakespeare, among which are *Macbeth*, the *Merchant of Venice*, and *Hamlet*. He married, in 1862, the youngest daughter of the late Victor Emmanuel, King of Italy, the Princess Pia, by whom he has two sons, Prince Carlos and Prince Alfonso.

Louis II. (Otho Frederick William), King of Bavaria, b. 1845. He succeeded his father 1864. The keenness of the rivalry between Austria and Prussia at that time eventually led to the war which humbled Austria after the battle of Sadowa (see AUSTRIA). At the conclusion of the war, King Louis entered into an offensive and defensive alliance with Germany. In the war of 1870-1, the Bavarian troops were allied to the Prussians, and displayed great bravery. King Louis was an enthusiastic friend of the great composer the late Richard Wagner, and is a great, though eccentric, admirer and patron of music.

Louvre, The. See ASSYRIOLOGY.

Lovat, Simon Fraser, 15th Baron (creat. 1540); b. 1828; succeeded his father 1875. The father of the present peer was raised to the peerage of the United Kingdom in 1837, on claiming succession to the title of the 13th Lord Lovat, who was beheaded on Tower Hill for his connection with the rising in 1745.

Lovat Title, The. See PRIVILEGES, COMMITTEE FOR.

Lovelace, William King-Noel, 1st Earl of (creat. 1838); b. 1805; succeeded his father in the barony in 1833. The 1st peer (nephew maternally of the celebrated John Locke) was Lord High Chancellor of England.

Lovell and Holland, Baron. See EGMONT.

Low Church. See ESTABLISHED CHURCH.

Lowe, Major-General Drury, b. Jan. 3rd, 1832, gazetted cornet in the 17th Dragoons, 1854; and in December 1881 Major-General, having always served in the same regiment. He served in the Crimean war (1854-6), and was present at the siege and fall of Sebastopol. He took part in suppressing the Indian mutiny (1858-9), and was mentioned in the *London Gazette*, July 17th, 1860. Again, in 1879, he served through the Zulu campaign, and was slightly wounded at the battle of Ulundi. His name again appears in *London Gazette* (August 21st, 1879), and he received a medal with clasp, and C.B. As Brigadier-General he served on the staff in South Africa from March 1881 to April 1882, and

subsequently commanded the cavalry division in the Egyptian campaign of 1882.

Lowell, James Russell, D.C.L., LL.D., son of Rev. Charles Lowell, D.D., was b. at Cambridge, Massachusetts, U.S.A., 1819. Graduated at Harvard College (1838), and at Harvard Law School (1840). Published some poems (1841) entitled "A Year's Life," another volume of poems (1844); some directed against slavery (1848); followed by the "**Biglow Papers**," a satirical essay against slavery and the Mexican war. Travelled in Europe (1851-52); delivered a course of lectures before Lowell Institute, Boston, on "British Poets" (1854-55); appointed Professor of Modern Languages and Literature at Harvard College (1855); spent a year at Dresden; was editor of the *Atlantic Monthly* (1857-62), and *North American Review* (1863-72); published (1868) "Commemoration Ode" in honour of the alumni of Harvard who fell in the Civil War, and afterwards six other works; travelled again in Europe (1872-74), and received the above degrees from Oxford and Cambridge respectively. His wife, **Maria W. Lowell**, was a poet of considerable merit and a native of the same State. In 1880 he was appointed Minister of the United States, America, to Great Britain, from which he was recalled (1885), and was succeeded by Mr. Edward J. Phelps.

Lowther, Rt. Hon. James, P.C., b. 1840; younger son of Sir C. H. Lowther, Bart., of Swillington House, Leeds. Entered Trinity College, Cambridge, and took degree of M.A. (1866). Called to the bar at the Inner Temple (1864). Was returned to parliament for York in the Conservative interest (1865-80), North Lincolnshire (1881-85), and lost his seat at the recent election. Mr. Lowther has held the following offices:—Parliamentary Secretary to the Poor Law Board (1868), Under-Secretary of State for the Colonies (1874-78), Chief Secretary for Ireland and Keeper of the Privy Seal (1878-80). He did not join Lord Salisbury's ministry in June 1885, disapproving of the Conservatives taking office; but he continued a staunch supporter of his party in the House of Commons. Mr. Lowther is J.P. and D.L. for the North Riding of Yorkshire.

Lowther, The Hon. William, M.P., was b. 1821. Educated at Magdalene Coll., Cambridge. Formerly belonged to the Diplomatic Service. He was Attaché at Berlin (1841); Secretary of the Legation at Naples (1852); St. Petersburg (1858); Berlin (1862); and Minister Plenipotentiary to the Argentine Republic (1867). He is Deputy Lieutenant and J.P. for Westmoreland and Cumberland, and J.P. for Bedfordshire. Returned in the Conservative interest as member for Westmoreland (1868-85); North Westmoreland (1885).

Loyson, Charles. See OLD CATHOLICS.

Luapula River. See CONGO FREE STATE.

Lubbock, Sir J., M.P., F.R.S., D.C.L., LL.D., eldest son of the late Sir J. W. Lubbock, was b. 1834. Educated at Eton. Member of the banking firm of Roberts, Lubbock and Co. Vice-Chancellor of the University of London (1874-80); Rede Lecturer at Cambridge (1886). He has written numerous scientific treatises. Sir J. Lubbock's name is closely identified with the Bank Holidays, the bill to legalise these having been introduced by him in the House of Commons. He has also introduced in the present session the Shop Hours Regulation

Bill (1886). Returned in the Liberal interest as member for Maidstone (1870-80); London Univ. (1885).

Luby. See FENIANS.

Lucan, George Charles Bingham, 3rd Earl (creat. 1725); b. 1800; succeeded his father 1839; elected an Irish representative peer 1840. Entered the army (1816); served on the staff of the Russian army in Bulgaria (1828); appointed to command a division of cavalry, with the local rank of lieutenant-general, in the Eastern expedition (1854); was wounded at Balaklava, and received the Crimean medal and 4 clasps.

Lucy, Henry W., b. at Crosby, near Liverpool, December 5th, 1845. Was apprenticed to a Liverpool merchant. Joined the staff of the *Shrewsbury Chronicle* as chief reporter (1864). Went to Paris to attend lectures at the Sorbonne (1869). Returned to London to join the staff of the morning edition of the *Pall Mall Gazette* (1870). Joined the *Daily News* as special correspondent, chief of the gallery staff, and writer of the parliamentary summary (1873). Mr. Lucy is the author of a "Handbook of Parliamentary Procedure," and "Men and Manners in Parliament," "Diary of Two Parliaments" (Vol. I., published 1885, deals with the Disraeli Parliament; Vol. II., published Feb. 1886, treats of the Gladstone Parliament), published also in America and Australia; "East and West," a diary of a voyage round the world. He was a frequent contributor to London and American periodical literature. In 1882 his first novel, "Gideon Fleyce," was published. On the death of Mr. Tom Taylor, who in succession to Mr. Shirley Brooks had written the "Essence of Parliament" for *Punch*, Mr. Lucy was invited to continue the work. This he did in a new style, now familiar as "The Diary of Toby, M.P." Mr. Lucy was also understood to contribute to the *Observer* the series of articles which appear weekly, during the parliamentary session, under the title, "From the Cross Benches." As special correspondent of the *Daily News* Mr. Lucy accompanied the Princess Louise and the Marquis of Lorne on their first visit to Canada, on the appointment of the Marquis to the Governor-Generalship. On the retirement of Mr. Hill from the editorship of the *Daily News*, Mr. Lucy was selected to succeed him (1886).

Luderitzland and Angra Pequena. A German possession on the west coast of Africa (see GERMAN COLONISATION). It was acquired in 1884-5 by private purchase and subsequent arrangement with the British Government. It extends from Cape Frio to the Orange river, about 700 miles, but excluding Walfisch Bay, which is British. Inland it extends to the Kalahari desert, and is bounded by the 20th meridian E. long., including **Ovampo**, **Damara**, and **Great Namaqua Lands**. **Angra Pequena** is the port and nucleus of settlement, with village of **Bethany** further inland. Regular sea communication with the Cape has been established. Climate favourable, but soil sterile and sandy. Water at present has to be brought from Cape Town. Natives are docile, of the Hottentot tribes. There is reported to be great mineral wealth.

Luke Howard's System. See METEOROLOGY.

Lunacy. The law of lunacy makes provision for the custody of lunatics and care of their property. For the reception of lunatics there

have been provided (a) county and borough asylums, maintained out of the rates, for the reception of pauper lunatics; (b) hospitals provided by charity, which must be duly registered; (c) private asylums kept for profit, which must be duly licensed. Upon hearing that there resides in the parish a pauper supposed to be a lunatic, the relieving officer is to give notice to a justice, who shall order the pauper to be brought before him, and with the assistance of a medical man hold an examination. Upon the medical certificate of insanity the justice, if satisfied, is to make an order for the lunatic's admission to an asylum. A certificate signed by the medical officer and by another medical man called in for the purpose is held conclusive evidence of insanity. Where the pauper cannot be brought before any justice, the clergyman and relieving officer may examine him at his own abode, and make a joint order. Lunatics who are not paupers may be sent to the borough or county asylum, the visitors in such cases requiring the person who applies to give an undertaking to defray the necessary expenses. For admission into hospitals and private asylums there is required, firstly, a written order from the person sending the lunatic, and secondly, certificates in the prescribed form from two medical men. Provision is made for the inspection of hospitals and licensed houses by visitors appointed by the magistrates in quarter sessions. The visitors must report to the Commissioners in Lunacy. The Commissioners may order any person detained without sufficient cause shown to be set at liberty. The keepers are bound to provide medical attendance, and to report the admission, death, removal, discharge, or escape of each inmate. The Commissioners in turn make their report to the Chancellor. The sovereign is the guardian of all lunatics, and as such has the care of their property. Upon petition or information the Chancellor will issue a commission to inquire into the alleged lunatic's state of mind. The commission is directed to the Masters in Lunacy, but the inquiry takes place before a jury. If upon examination of the alleged lunatic the jury return a verdict of insanity, he is committed to the care of a friend called his committee, and an allowance is made out of his property to maintain him in some authorised establishment. A committee of the estate of the lunatic is appointed at the same time, and may be another person. Indeed, the lunatic's next heir would be a proper committee of his landed estate, but an improper committee of his person. Every person found lunatic by inquisition must be visited by official visitors at least four times a year. The Queen may under her sign manual appoint certain judges of the Supreme Court to exercise concurrently with the Chancellor this jurisdiction over lunatics. Criminal lunatics form a class apart, and separate asylums have been provided for them. They include (a) persons acquitted at their trial upon the ground of insanity; (b) persons undergoing punishment who have given signs of insanity, and upon inquiry by two justices assisted by two medical

men have been found to be insane. The Secretary of State can appoint all such officers and assistants, and can make all the rules required in an asylum for criminal lunatics. When insanity is alleged on behalf of a person on his trial, the burthen of proof lies on the defence. Even when he is an acknowledged lunatic, the presumption is that the offence was committed in a lucid interval. What degree of insanity makes an agent irresponsible is still extremely obscure. If at any stage of the proceedings the accused become insane, no further steps can be taken. A bill to amend the law relating to lunacy was introduced by Baron Herschell in the House of Lords, and passed through Committee March 18th, 1886.

Lunardi, Vincent. See BALLOONING.

Lurgan, William Brownlow, 3rd Baron (creat. 1837); b. 1858; succeeded his father 1882.

Lyceum Theatre. See IRVING, HENRY.

Lyell, Sir Charles. See GEOLOGY.

Lyell, Mr. Leonard, M.P., was b. 1850. He is nephew of Sir Charles Lyell, the eminent geologist. Formerly Lecturer on Geology in the Royal School of Mines, London. J.P. for Forfarshire. Returned in the Liberal interest as member for Orkney and Shetland (1885).

Lymington, Viscount, M.P., the eldest son of the Earl of Portsmouth, was b. 1856. Educated at Eton and at Balliol College, Oxford, where he graduated B.A. with honours in classics and history (1879). Deputy Lieutenant for Wexford, and J.P. for Devonshire and Hampshire. Entered parliament in the Liberal interest as member for Barnstaple (1879-85); elected for North-East Devon (1885).

Lyons, Dr. See FORESTRY.

"Lyons Mail," The. See IRVING, HENRY.

Lyons, Richard Bickerton Pemell Lyons, P.C., 1st Visct. (creat. 1881); b. 1817; succeeded his father 1858. Appointed envoy to the United States (Dec. 1858); ambassador at Constantinople (Aug. 1865); ambassador at Paris (June 1867), and still retains that post. His father, created Baron Lyons, was a distinguished naval commander, receiving his titles for services during the Crimean war.

Lyttelton, Charles George Lyttelton, 5th Baron (creat. 1704); b. 1842; succeeded his father 1876. Was M.P. for East Worcestershire (May 1868 to Feb. 1874). The 1st peer was in 1755 Chancellor of the Exchequer.

Lytton, Edward Robert Bulwer-Lytton, 1st Earl of (creat. 1880), only son of the 1st Baron Lytton; b. 1831; succeeded his father as 2nd Baron Lytton 1873. Was appointed Viceroy and Governor-General of India in 1876; resigned May 1880, when he was raised to an earldom. The present peer's father was the celebrated novelist and author.

Lyveden, Fitz-Patrick Henry Vernon, 2nd Baron (creat. 1859); b. 1824; succeeded his father 1873. The 1st Baron held various public offices, including Secretary of the Board of Control, Secretary at War, and Lord President of the Council; he also sat in parliament for upwards of thirty years.

M

Maas, Mr. Joseph, the distinguished tenor vocalist, was b. 1848. Educated as a choir boy at Rochester Cathedral. Studied at Milan, returning to England 1871, when he appeared first in public at the Leslie Choir Concerts, and in "Babil and Bijou." Visited America, where he remained some years. On his return he appeared in the "Golden Cross," under the auspices of Mr. Carl Rosa, and took the character of Rienzi in Wagner's opera (1879). Mr. Maas, who was exceedingly popular, appeared to greatest advantage in his renderings of the operas of Balfe and Wallace in Faust, as also in M. Massenet's "Manon" (1885), and in Handel's oratorios. He died Jan. 1886.

McArthur, Mr. Alexander, M.P., F.R.G.S., was b. 1814. Formerly a member of the Legislative Assembly of New South Wales; member of the Legislative Council (1861). Is J.P. for Surrey and Commissioner of Lieutenancy for the City of London. Returned in the Liberal interest as member for Leicester (1885).

Macartney, Mr. John William Ellison, M.P., was b. 1818. Educated at the Universities of Bonn and Munich. Called to the bar at the Middle Temple (1840), and to the Irish bar (1848). Deputy Lieutenant and J.P. for Tyrone, and J.P. for Fermanagh; High Sheriff of county Armagh (1869). Member of the Royal Irish Academy. Returned in the Conservative interest as member for Tyrone County (1874-85); South Antrim (1885).

"**Macbeth.**" See IRVING, HENRY.

MacCabe, Cardinal, d. Feb. 12th, 1885. He was b. in one of the poorest districts of Dublin. After a successful career at Maynooth, he obtained a curacy at Clontarf, and devoted himself to the social and moral improvement of the poor. Cardinal Cullen selected him for the office of administrator in the Cathedral, Marlborough Street, where he gave further proofs of his fidelity and wisdom. He was subsequently made Vicar-General and a Canon of the Cathedral. After the death of Cardinal Cullen (Oct. 1878), he was created Archbishop, and in 1882 the Pope elevated him to the dignity of a Cardinal, on St. Patrick's Day.

McCalmont, Captain James, M.P., was b. 1847. Educated at Eton. Late captain 8th Hussars and A.D.C. to the late Duke of Marlborough when Viceroy of Ireland. Returned in the Conservative interest as member for East Antrim (1885).

McCarthy, Mr. Justin, M.P., was b. 1830. Has been engaged for many years in journalistic enterprise. For some time foreign editor of the London *Morning Star*. Author of "A History of Our Times." Returned as a Nationalist for Longford (1879-85); North Longford (1885).

McCarthy, Mr. Justin Huntly, M.P., was b. 1860. Educated at Univ. Coll. Sch. Author of an "Outline of Irish History," "England under Gladstone," and the comedy of "The Candidate." Returned as a Nationalist for Athlone Borough (1884-85); Newry (1885).

Macclesfield Silk Industry. See SILK MANUFACTURES.

Macclesfield, Thomas Augustus Wolstenholme Parkes, 6th Earl of (creat. 1721); b. 1811; succeeded his father 1850. Was M.P.

for Oxfordshire (1837 to July 1841). The 1st peer was appointed Lord High Chancellor of Great Britain (1718), but having been impeached on a charge of corruption, he was removed from the chancellorship, and fined £30,000.

MacCloskey, John, Cardinal-Archbishop of New York; b. March 20th, 1810, at Brooklyn, N.Y., whither his parents had emigrated from Ireland. He was educated at Mount St. Mary's College, Emmetsburg, graduating B.A. and M.A. In 1834, having been ordained priest, he went to Rome to finish his education, and subsequently resided a year in France. He commenced his spiritual functions at St. Joseph's Church, New York (1838), and became so distinguished for his energy and ability that in 1841 he was appointed first president of St. John's College, Fordham. He resigned this post shortly after, and returned to the charge of St. Joseph's until 1843, when, with the title of Bishop of Auxerre, he became coadjutor of Bishop Hughes. His administrative abilities attracted so much attention that, on the division of the New York diocese taking place (1847), Bishop MacCloskey was nominated first bishop of Albany. In this new sphere his zeal, activity, and eloquence rendered him very popular, and obtained for him the means of building churches in almost every town. He introduced into his diocese a great number of religious and charitable organisations; began and completed the cathedral of Albany; and founded a theological college for the diocese forming the ecclesiastical province of New York. The Archbishopric of New York falling vacant in 1864, by the death of Archbishop Hughes, Bishop MacCloskey was elevated to the see. In 1875 he was created a Cardinal of the Order of Priests, being the first American cardinal appointed. On the death of the Pope (in 1878) he was summoned to attend the conclave of Cardinals for the election of a successor to Pius IX.; and it was in consequence of this visit that, shortly after the election of Pope Leo XIII., the canon law was introduced into the United States, which now ceased to be considered as a Roman Catholic mission church only. Archbishop MacCloskey was the most eminent Roman Catholic divine and prelate in the United States, and was distinguished for his eloquence, religious zeal, and practical philanthropy. He died October 10th, 1885.

McCulloch, Mr. John, M.P., was b. 1842. He is a Vice-President of the Scottish Chamber of Agriculture. Returned in the Liberal interest as member for St. Rollox Division, Glasgow (1885).

Macdermott, The, Q.C., holds office in the present Gladstone cabinet as Solicitor-General for Ireland (Feb. 1886).

McDonald, Mr. Peter, M.P., was for some time engaged in the scholastic profession. Partner in the firm of Cantwell and M' Donald, wine merchants, etc., Dublin. Returned as a Nationalist for North Sligo (1885).

Macdonald, Mr. R., M.P., M.D., of Dunelm, was b. 1840. Educated at the Univs. of Glasgow and Edinburgh. He graduated M.D. at Durham University. Is now a student at the Middle

Temple. Returned in the Liberal interest as member for Ross and Cromarty (1885).

Macdonald, The Rt. Hon. John Hay Athole, M.P., P.C., was b. 1836. Educated at the Edinburgh Academy and University. Called to the Scottish bar (1859); Q.C. (1880). Appointed Sheriff of Ross, Cromarty and Sutherland (1874); Solicitor-General for Scotland (1876); Sheriff of Perthshire (1880); Dean of the Faculty of Advocates (1882-85); Lord Advocate (1885). Mr. Macdonald is an eminent electrician and an Associate of the Society of Telegraph Engineers and Electricians. He is J.P. and Deputy Lieutenant for Edinburgh. Returned in the Conservative interest as member for the Universities of Edinburgh and Aberdeen (1885).

"Mace Sloper." See NOMS DE PLUME.

Macfarlane, Mr. Daniel Horne, M.P., was b. 1830. Returned as Liberal member for co. Carlow (1880-85); Argyllshire (1885).

Macfarren, Sir George Alexander. The son of Macfarren the dramatist, b. in London 1813. Entered the Royal Academy of Music (1829), rising to be one of its professors (1834). He wrote for the orchestra and the stage, and did good service in the careful editing of old masterpieces by Purcell, Handel, etc. His operas "Don Quixote" (1846), "Charles II." (1849), "Robin Hood" (1860), and others, are amongst the best of our native stage. He wrote also the cantatas "Lenora" (1851), and "May-day" (Bradford Festival, 1856). Blindness overtook the composer soon after 1860. In 1873 he began the composition of an oratorio, producing "John the Baptist" for the Bristol Festival, followed by "The Resurrection" (Birmingham, 1876), and "Joseph" (Leeds, 1877). Meanwhile, in 1875, on the death of Sterndale Bennett, Macfarren succeeded him as Professor of Music at Cambridge and Principal of the Royal Academy of Music at London. He received the honour of knighthood (1883). His works on **Harmony** (1860) and **Counterpoint** (1879) are important contributions to musical theory.

McGarel-Hogg, Sir James Macnaghten, M.P., K.C.B., eldest son of the late Sir James Weir Hogg, member of the Council for India, was b. at Calcutta 1823. Married (1857) the Hon. Caroline Elizabeth Emma, eldest dau. of Lord Penrhyn. Educated at Eton and Ch. Ch., Oxford. Late 1st Life Guards. Chairman of the Metropolitan Board of Works (1870). J.P. for Middlesex, co. Antrim, and Westminster. Returned in the Conservative interest as member for Bath (1865-68); Truro (1871-85); Middlesex, Hornsey Division (1885).

Machines. See TRADE of 1885.

MacInnes, Mr. Miles, M.P., of Rickerby, Cumberland, was b. 1830. Educated at Rugby and Balliol Coll., Oxford. J.P. for Cumberland and Middlesex, and a Director of the London and North-Western Railway Co. Returned in the Liberal interest as member for Hexham Division of Northumberland (1885).

McIver, Mr. Lewis, M.P., was b. 1846. Educated at Kensington grammar school and Bonn University. Called to the bar at the Middle Temple. Formerly a member of the Indian Civil Service. Returned in the Liberal interest as member for Devon, Torquay Div. (1885).

McKane, Professor John, M.P., LL.D. Educated at the Queen's Coll., where he graduated LL.D. Called to the bar (1864); late Professor of Civil Law, Queen's Coll., Belfast. Returned in the Conservative interest as member for Mid Armagh (1885). Died Jan. 1886.

McKenna, Sir Joseph Neale, M.P., was b. 1819. Educated at Trin. Coll., Dublin. Called to the Irish bar (1848). He is Deputy Lieutenant and J.P. for county Cork, and J.P. for county Waterford. He was knighted (1867). Returned as a Nationalist for Youghal (1865-68, 1874-85); South Monaghan (1885).

Mackenzie, Alexander Campbell, author of the oratorio "The Rose of Sharon" (written for the Norwich Festival of 1884). The son of a Scottish musician, he was b. at Edinburgh 1847. He studied and played as violinist in Germany (1857-62), when he became King's Scholar at the Royal Academy of Music, London. Since then, till his great success, his life was one of hard work, and his compositions, very scholarly and original, though few, were on a scale too small to make known the great genius he is now seen to possess. Mackenzie composed a violin concerto for the Birmingham festival of 1885, which was very favourably received.

McLagan, Mr. Peter, M.P., was b. 1823. Educated at Edinburgh Univ. He is Deputy Lieutenant and J.P. for Linlithgowshire, and J.P. for Edinburghshire. Returned in the Conservative interest as member for Linlithgowshire (1865-85); re-elected 1885. (He has become a Liberal since his original return.)

McLaren, Mr. Charles Benjamin Bright, M.P., M.A. (Edin.), was b. 1850. Educated at Edinburgh Univ., where he graduated M.A. with first-class honours (1870). Called to the bar at Lincoln's Inn (1874). Sat as Liberal member for Stafford (1880-85); re-elected 1885.

Maclean, Mr. Francis William, M.P., was b. 1844. Educated at Westminster and Trin. Coll., Cambridge, taking honours in the Classical Tripos (1866). Member of the Inner Temple and Lincoln's Inn. Called to the bar (1868). Returned in the Liberal interest as member for Mid Division of Oxfordshire (1885).

Maclean, Mr. James Mackenzie, M.P., of Malabar Villa, Grove Park, Chiswick, was b. at Liberton, near Edinburgh 1835. Editor of the *Bombay Gazette* (1859). At present a proprietor of the *Western Mail*. Is a Fellow of the Univ. of Bombay. Returned as Conservative member for Oldham (1885).

MacMahon, Ex-President Marshal Marie Edmé Patrick Maurice de, Duke of Magenta, b. of an Irish family, at Sully, in France, July 13th, 1808. He was educated for the army at St. Cyr. From 1830 to 1848 Captain MacMahon was mostly engaged in the Algerian war. He distinguished himself in the storming of Constantine. Major in 1840, and Colonel of the Foreign Legion, he was made a General in the Crimean war, and succeeded General Canrobert at the head of a division. For his gallantry in storming the Malakoff he received the G.C.L.H. and K.G.C.B. In the Franco-Italian war he came unexpectedly upon the Austrians at Magenta and defeated them. For this deed he was created Field-Marshal and Duke of Magenta. He was made Governor of Algeria in 1864. In the Franco-Prussian war he commanded the First Army Corps. He was forced to retreat before the Crown Prince after two preliminary battles, and suffered a crushing defeat, after having been severely wounded. He was commander-in-chief of the French army at Versailles, which invested Paris under the Commune. In November 1873 Marshal MacMahon was elected President of the Republic for a term of seven years, but resigned (Jan.

1879). He was succeeded by M. Grévy, and has since retired from political life.

"**Macmillan's Magazine**" was founded October 1859 (monthly, 1s.). Its pages contain serials, essays on various topics of current interest, with reviews of literature of the day. Editor, **Mr. Mowbray Morris**.

Macnaghten, Mr. Edward, Q.C., M.P., M.A., was b. 1830. Educated at Trin. Coll., Cambridge, of which College he is a Fellow. Called to the bar at Lincoln's Inn (1857); Q.C. (1880). J.P. for co. Antrim. Returned in the Conservative interest as member for co. Antrim (1880-85); North Antrim (1885).

Madagascar. The third largest island in the world; is situated to the east of Africa, from which it is separated by the Mozambique Channel. The Indian Ocean surrounds it on all sides. It is about 900 miles long by 500 broad, and was discovered by Vasco de Gama in the sixteenth century. Its area is about that of France, and it has a population—composed of Hovas (central province), Betsimisaraka (east coast), Sakalava (north and west coasts), Bara (south-west), Betsileo (south), Antsihanaka (north central)—of nearly 5,000,000. The natives are a harmless, industrious, and progressive people. They are under the government of the Hova tribe. Antananarivo is the capital of the island; it is a striking and well-built town upon a lofty hill about two hundred miles inland, and is the residence of the sovereign, Ranavalona III., the second Christian queen of the country. The soil is fertile, and the island has rich mineral deposits, at present unworked, and magnificent forests of valuable timber. Coal is found in the north-west, and a growing export trade in hides, gum, indiarubber, wax, and coffee is carried on with the neighbouring islands and Europe. Christianity has taken firm root amongst the Malagasy, and a system of national education has been introduced with marked success. The climate is very hurtful to Europeans, especially on the coast. There are no large animals, but crocodiles abound in the rivers, and the lakes are remarkable for their enormous harvests of fish, which with rice, are the chief articles of diet amongst the poorer classes. Immense herds of cattle roam over the grassy plains, from which the markets of Mauritius and Bourbon are regularly supplied. Treaties of friendship and commerce have been entered into between the Malagasy and the French, English, Italian, German, and American governments, which are all represented in the island by consuls. By virtue of an obscure clause in an old agreement, entered into between a former king and a French company, the French have since 1833 been attempting to take possession of the rich and valuable north-west province. (For particulars of this dispute, 1883-86, see FRANCE.) The trade of the island has, in consequence of this, suffered considerably. Its manufactures consist of lambas, hats, boots, chains and articles of jewellery and cabinet work. The people are thrifty, self-restrained, and marvellously endowed with the faculty for imitation. During the past century their social and intellectual progress has been remarkable. The laws have been recodified, trial by ordeal abolished, foreign slavery forbidden, Sunday set apart for rest and religious uses, schools established, the army reorganised, hospitals opened, and public trial substituted for the secret judgment and summary execution of criminals lately

customary throughout the island. Domestic slavery in a modified form still exists. There are active missions of the London Society, the Church of England, and the Jesuits, at work on the coast and in the central provinces. The government is approaching almost to a limited monarchy, the sovereign being assisted in her functions by a council of nobles and heads of clans chosen by herself. In 1883 (latest return) the exports to the United Kingdom were £87,865; the imports from United Kingdom £39,130. The population of the capital numbers 80,000. The present Queen succeeded July 13th, 1883.

Madder. See WASTE MATERIALS.

Madder, Dr. Richard Robert, F.R.C.S., the son of a Dublin merchant, was b. 1799. Entered the medical profession, becoming (1829) a F.R.C.S. Lond. Was a colleague of Wilberforce in the slave emancipation movement. Was special magistrate in Jamaica (1833); superintendent of the liberated Africans at Havannah under the Colonial Office (1836); Acting Judge Advocate of the Mixed Commission Court under the Foreign Office (1839); Commissioner of Inquiry on the West Coast of Africa (1841), where he was instrumental in suppressing the "pawn system"; Colonial Secretary of West Australia (1847); Secretary of the Loan Board Fund (1850). After resigning the last office, he devoted himself to literature, and amongst the many works he published may be mentioned "Life and Times of Savonarola," "Egypt and Mahomed Ali," "The Isle of Cuba," "Connexion of the Kingdom of Ireland with the Crown of England," etc. Dr. Madder d. Feb. 5th, 1886, at Booterstown, Dublin.

Madrigal. A short poem on some motto or "conceit," secular or sacred; hence a choral composition of the polyphonic kind, that is built upon one or more subjects treated with various devices of counterpoint, imitation, etc., forming the musical expression of such a poem. The word is the Spanish *madrigale*, a sort of satirical motto poem, other nations being quick to follow the Spanish models. The prime madrigalian era is that of our Elizabeth and James I., and the English are the greatest composers in the style.

Magenta, Duke of. See MACMAHON, EX-PRESIDENT MARSHAL.

Magniac, Mr. Charles, M.P., was b. 1827; educated at Eton and Trinity College, Cambridge. Returned in the Liberal interest as member for St. Ives (1868-74), Bedford (1880-85); North Beds (1885). Mr. Magniac is chairman of the London Chamber of Commerce.

Magyars. See AUSTRO-HUNGARY.

Mahdi, The. The term Mahdi, meaning literally "the well-guided one" (i.e. led by God), is used by the followers of Mahomet both in a general and a particular sense. As a general term it is applied to any prophet or even ordinary person distinguished for his devotion; but in its particular meaning it exclusively denotes the expected saviour of the line of Mahomet, who, after destroying iniquity and restoring justice upon earth, is to prepare the world for the final judgment. Mahometanism borrowed the Messianic idea, like much else in its religion, from Christianity. Mahomet recognised the importance of the mission of Christ, but denied His divinity. He ranked Him above all the prophets of the old

dispensation; and it is on this account, doubtless, that the believers in the coming Mahdi consider also that he will be assisted by Christ as his vicar. Christ, after destroying antichrist, annihilating the Jews, and converting Christians and all idolaters to Islamism, is to repeat the prayer which the Mahdi is to utter previous to the sound of the last trumpet, the resurrection, the judgment, and the final consummation of all things. Curiously enough, however, no mention of the Mahdi is made in the *Koran*; but tradition ascribes to **Mahomet** the oral declaration that "even though time shall have but one day more to last, God will call up a man of my family, who will fill the earth with justice, as it is now filled with iniquity." The title was first assumed by an ambitious adventurer, **Mokhtar**, who arose in Persia fifty years after the death of the prophet, and who styled himself "**Lieutenant of the Mahdi**." Another Mahdi was **Moez**, the founder of Cairo, who held his position by his valour and gold. There were numerous mahdis, who have succeeded in agitating the Mahometan world previous to the advent of **Ahmed Mohammed**, the Mahdi of the Soudan. There was a strong individuality about this man, which deeply impressed the brave and fanatical Arab tribes, over whom he exercised so powerful an influence. He differed from other mahdis in that he was not a miracle-monger, and did not attempt to invest himself with a veil of mystery. All that we know of him tends to show that he was a man of profound conviction. Like Mahomet himself, he evidently mistook his own enthusiasm for a Divine inspiration. He lived abstemiously, and observed the severest discipline imposed by the *Koran*, excepting as regards matrimony, in which he is said to have exceeded the limits of orthodoxy. Two apparently authentic accounts of him have reached us: one by **M. Mousa Peney**, a native of the Soudan, and son of a brave French explorer in that region; the other, a report by **M. Clermont Ganneau** of a conference of the *Ulemas* or of *El Azhar*, mosque at Cairo. A translation of this report was transmitted by the author to **Professor Darmesteter**, whose little work entitled "**The Mahdi**," translated by **Miss Ada S. Ballin** (Fisher Unwin), may be consulted for further information on this subject. Mohammed Ahmed (Mahomet Achmet) was born at Dongola in 1843. It is said that at twelve years of age he knew the *Koran* by heart. After the death of his father, his two brothers, who were boat builders on the White Nile, being impressed with his marvellous capacity for learning, defrayed the cost of his education under **Abdel Dagin** and **El Gourachi**, two Arab professors. After completing his education he settled in the island of the *Aba* in the Nile, where he lived in retirement for fifteen years, the period which Mahomet himself spent in meditation before declaring himself as the prophet of God. His life at *Aba* was that of a hermit, passing his time chiefly in prayer and fasting. He thus inspired the neighbouring tribes with a conviction of his sanctity, and when at length he entered upon his fortieth year, the time of life at which Mahomet commenced his mission, he sallied from his retirement, to be recognised first by the *Beggamas* and afterwards by other tribes as the true Mahdi. According to Arab tradition, the time for the final triumph of Islam—namely, the year 1300 of the *Hegira* (1883 of our era)—was approaching. He sent out

a number of missionaries, whose enthusiasm he had aroused to announce to the *Sheikhs* of the Soudanese tribes that he was none other than the long expected Mahdi; that Mahomet had come from God to announce to him that the Turkish dominion was about to end, that the Soudan was to rise on every side, and that he himself, after having passed the necessary time in the Soudan, was to go up to Mecca to be acknowledged by the great Sheriff. The Turks are regarded as apostate Moslems by the Arabs and are more hated by them even than the English; and the desire to be rid of the Turkish, or in other words the Egyptian yoke, was an additional inducement on the part of these wild Arab tribes to acknowledge the divinity of Ahmed Mohammed. What followed his assumption of the functions of a warrior as well as those of a prophet includes the history of the Soudan (*q.v.*) since the destruction of Hicks Pasha's army (see *EGYPT*). Ahmed Mohammed died of small pox in 1885.

Mahmoud of Candahar. See *AFGHANISTAN*.

Mal. See *SOUDAN*.

"**Malden Tribute of Modern Babylon.**" See *STEAD, MR. W. T.*

Maine, Sir H. R., K.C.S.I., LL.D., the most distinguished of modern writers on civil law and jurisprudence, was b. 1822. Educated at Pembroke College, Cambridge, where he graduated; his brilliant career as a student terminating in his becoming senior classic and university scholar. Was appointed Regius Professor of Civil Law in the same university (1847), and was elected Reader on Jurisprudence at the Middle Temple (1854). Appointed law member of the Supreme Government of India (1862), and during his seven years' tenure of this important office succeeded in introducing reforms with which his name will ever be associated. On his return home (1869) he was appointed Corpus Professor of Jurisprudence at Oxford. He is the author of several works, which occupy almost as important a place in his own department as the works of Darwin in the department of science. His chief works are "*Roman Law and Legal Education*," "*Ancient Law in Connection with the Early History of Society and its Relation to Modern Ideas*," "*Village Communities in the East and West*," and "*Lectures on the Early History of Institutions*."

Maitland, Major F. H. See *PRIVILEGES, COMMITTEE FOR*.

Maitland, Sir John. See *PRIVILEGES, COMMITTEE FOR*.

"**Maitland, Thomas.**" See *NOMS DE PLUME*.

Major Key and Scale of C. See *SCALES (MUSIC)*.

Makers of Playing Cards, The Worshipful Company of. See *CITY GUILDS*.

Makins, Lieutenant-Colonel W. T., M.P., was b. 1840. Educated at Harrow and Trin. Coll., Cambridge, where he graduated M.A. Called to the bar at the Middle Temple (1862). Is J.P. and Deputy-Lieutenant for Essex, J.P. for Oxfordshire, and honorary colonel of the 1st Essex Artillery Volunteers. Returned in the Conservative interest as member for South-East Essex (1885).

Malagasy. See *MADAGASCAR*.

Malins, Mr. Joseph. See *GOOD TEMPLAR ORDER, THE*.

Mallet, Mr. Robert. See *EARTHQUAKES*.

Malmesbury, James Howard Harris, P.C., 3rd Earl of (creat. 1800; b. 1807; succeeded his father 1841. Was Secretary of State for Foreign Affairs (Feb. to Dec. 1852, and Feb. 1858 to June 1859); Lord Privy Seal (July 1866 to Dec. 1868, and Feb. 1874 to Aug. 1876); has edited the "Diaries and Correspondence" of his grandfather, the first Earl.

Malt Feeding. See DAIRY FARMING.

Ma thustianism. A term loosely applied to designate any and all theories for checking over-population, i.e., increase in population in excess of the power of providing food and work for it. It originated in a "Treatise on Population," first published in 1798 by Thomas Malthus, Professor of History at Haileybury College, wherein the author pointed out the dangers and miseries of over-population, and expounded various theories respecting it. A society called the **Malthusian Society** exists, whose objects are to promote and extend thrift and the principles of political economy among the people.

Malt, White. See TORREFIED BARLEY.

Manchester Chamber of Commerce. See ENGINEERING.

Manchester Circular Railway, The. See ENGINEERING.

Manchester Cup. See RACING.

Manchester, Rt. Rev. James Fraser, D.D., late Bishop of, was b. at Prestbury 1818. He was educated at Bridgnorth, and at Shrewsbury under the tuition of the renowned Dr. Butler. He entered at Lincoln College, Oxford, and took the Ireland Scholarship in 1839, graduating with first-class honours. He was elected Fellow of Oriel (1840). In 1846 he was ordained deacon, and priest 1847, and was presented to the living of Cholderton. In 1858 he was appointed Assistant Commissioner on the inquiry into the state of rural education; and his report displayed such capacity and judgment that in 1865 he was sent to the United States and Canada to report upon the progress of education in those countries. In 1860 he was appointed to the living of Upton Nevett, near Reading. In 1870 the diocese of Manchester becoming vacant by the death of the Rev. Dr. Prince Lee, and a man of energy, of practical and moderate opinions in ecclesiastical matters, and a good parochial and careful worker being required, Mr. Gladstone offered the vacant see to Dr. Fraser, who accepted it. Immediately after his succession he threw himself energetically into the work, and became the leading spirit of all philanthropic movements, taking great interest in all questions connected with the social condition of the working class, and religious equality. He upheld religious and denominational education, and used his influence in 1873 to impress upon the Government the necessity for upholding any amendment on the lines of the Education Act of 1870. He took little active part in politics, but he voted against the Deceased Wife's Sister Bill (q.v.) in 1884, and received the thanks of the Manchester Diocesan Society. In the Eastern controversy of 1876-7, he took an active part on the side of the oppressed nationalities. Bishop Fraser was select preacher to the University of Oxford in 1852-62-72, and was one of the governors of Owens College, Manchester. In 1880 he married Miss Duncan. The later years of his life were rendered anxious by the Miles Platting ritualistic controversy. Dr. Fraser

died suddenly, Oct. 22nd, 1885, at Bishop's Court, Broughton. Bishop Fraser was a man of great devotion, activity, and sympathy, and among other useful reforms he instituted a diocesan conference for clergy and laity; advocated with some success the question of free seats, took a great interest in the working of the Diocesan Board of Education, and appointed a lay-diaconate, besides founding the Bishop of Manchester's fund for religious work among, and relief of the poor of, the diocese.

Manchester, Rt. Rev. James Moorhouse, D.D., Bishop of (founded 1847), was b. at Sheffield 1826. Educated at St. John's College, Cambridge, graduating Senior Optime (1853), M.A. (1860), D.D. (1876). He was ordained deacon (1853), priest (1854), vicar of St. John's, Fitzroy Square (1861), vicar of Paddington (1867), and Rural Dean. Hulsean Lecturer at Cambridge (1865), Warburtonian Lecturer (1874), Chaplain in Ordinary to the Queen, and Prebendary in St. Paul's Cathedral. Succeeded Dr. Perry as Bishop of Melbourne 1876. Bishop Moorhouse is on his way to England, where he is expected to arrive on April 28th, 1886.

Manchester May Meeting. See RACING.

Manchester New College, founded in Manchester 1786, now in University Hall, Gordon Square, London, "exists for the purpose of promoting the study of Philosophy, Theology, and Religion, without insisting upon the adoption of particular doctrines." No subscription or doctrinal statement is required either of trustees, professors, or students. Exhibitions and free admission to lectures are given to students for the ministry, without restriction as to the sect in which they will minister. The lectures are open to all persons on payment of fees. Principal, Rev. James Drummond, LL.D.

Manchester November Handicap. See RACING.

Manchester Ship Canal. See ENGINEERING.

Manchester Water Supply (Thirlmere). See ENGINEERING.

Manchester, William Drogo Montagu, 7th Duke of (creat. 1719; b. 1823; succeeded his father 1855. A Lord of the Bed-chamber to the late Prince Consort (Feb. to Dec. 1852); was M.P. for Bewdley (1848-51), and for Huntingdonshire (1852-55); author of "Court and Society from Elizabeth to Anne." The 1st peer was Lord Treasurer of England (1820), and subsequently Lord Privy Seal; the 2nd earl was a distinguished general; the 4th earl was an eminent diplomatist, and an active supporter of William III.; he became 1st Duke of Manchester.

Manchus. See CHINA.

Mancini, Signor. See ARBITRATION, INTERNATIONAL.

Mandamus, Writ of (Latin *mandamus*, "we enjoin"). A writ to enforce performance of a duty, especially a duty of a public or quasi-public nature. It issues in all cases where a party has a right to have a thing done and no other specific means of enforcing his right. Application for the writ must be made to the Queen's Bench Division of the High Court. Examples of the purposes for which a writ of mandamus may be issued are:—to compel a local authority to make a rate which the law requires it to make; to compel an inferior Court, which has not done so, to proceed in the determination of some matter within its jurisdiction; to compel a company

to comply with obligations imposed upon it by its Act of Parliament. The writ requires the person against whom it is issued to perform an act or show cause for not performing it. If he fail to show sufficient cause, the Court will grant a peremptory mandamus, which leaves no alternative to performance of what is required. The writ above described is known as the prerogative writ of mandamus, and differs from what is known as the statutory writ of mandamus. But the distinction is too technical to be explained here.

Manes. See EGYPTOLOGY.

Manitoba. A province of the Dominion of Canada, formerly known as the **Red River Settlement**, annexed to the Dominion under the authority of an Act of the Imperial Parliament in 1870, by an Act of the Dominion Parliament. It takes its name from Lake Manitoba, which is situated 60 miles S.W. of Lake Winnipeg. Area, 123,200 sq. miles; pop. 135,000. The capital is Winnipeg, at the junction of the Assiniboin and Red Rivers. Population composed principally of French and English half-breeds. The principal settlements are on the banks of the before-mentioned rivers. The general surface of the province is a level prairie, 80 feet above Lake Winnipeg and 700 feet above the level of the sea. The principal stream is the Red River, which rises in Minnesota, U.S., flows north through the province for 140 miles, and empties itself into Lake Winnipeg. The climate is healthy, but offers great extremes of temperature. Owing to the dryness of the atmosphere, the cold is not felt severely, and horses winter on the prairies without shelter. The soil is very fertile, wheat being the staple crop, and yields abundantly, forty bushels to the acre being commonly raised. The other cereals and vegetables of Europe thrive well. Flax and hemp have also been grown with success. The prairie grasses furnish excellent pasturage and good hay. Large numbers of horses, cattle, sheep, and swine are raised. Wood is scarce, and is chiefly confined to narrow strips along the Red and Assiniboin rivers. The principal trees are elm, oak, maple, and poplar, spruce, cedar and fir also occurring; the ash-leaved maple yields sugar. The rivers and lakes swarm with fish of several kinds. The New Canadian Pacific Railway (see **ENGINEERING**) will, it is anticipated, materially develop the vast resources of the province and contribute greatly to its growth and prosperity. The government of the province is based upon the Acts already mentioned of the Imperial and Dominion Parliaments. The executive power is vested in a lieutenant-governor appointed by the Governor-General of the Dominion, and an executive council, consisting of 5 members, with a legislative assembly, numbering 31 members, elected by districts for a term of four years.

"Manners, Mrs. Horace." See **NOMS DE PLUME**.

Manners, Rt. Hon. Lord John James Robert, P.C., b. 1818, second son of 5th Duke of Rutland, graduated in Trinity College, Cambridge, in 1839. He took a prominent place among a band of young politicians, who set on foot a movement for the social and political amelioration of the people of England, styled the "Young England" party. At the same time he contracted an intimate friendship with

Mr. Disraeli. He was first returned to parliament (1841-7) for Newark—along with Mr. Gladstone, who had not yet seceded from the Conservative ranks which he first joined—Colchester (1850-57), Leicestershire (1857-85), and at the recent election (1885) by a large majority for Leicestershire (Eastern Division). He strongly opposed the repeal of the Corn Laws and Sir R. Peel's free trade measures generally, and from that time (1845-6) attached himself closely to the Conservative party. Has held the following offices:—Commissioner of Public Works, with a seat in the cabinet (1852, 1858-9, 1866-8); Postmaster-General (1874-80, 1885). He took a most active and prominent part in the debates on the new Franchise Bill. Lord J. Manners is a G.C.B. (1880), D.C.L. (Oxon), 1876; and is the author of several poems and other works. He is heir-presumptive to the dukedom of Rutland.

Manners, John Thomas Manners, 3rd Baron (creat. 1807); b. 1852; succeeded his father 1864. The 1st peer was Lord Chancellor of Ireland (1807-28).

Manning, His Eminence Henry Edward, Cardinal of the Church of Rome, Archbishop of Westminster, was b. 1808. Educated at Harrow and Balliol Coll., Oxford. Graduated (1830), and became Fellow of Merton Coll. Rector of Lavington and Grafton, Sussex (1834-40); Archdeacon of Chichester (1840-51). Resigned these preferments (1851) and joined the Church of Rome. After residing some years at Rome, he was ordained a priest of that Church (1857), and appointed rector of St. Helen's and St. Mary's, Bayswater, where he founded a congregation entitled the "Oblates of St. Charles Borromeo." The degree of D.D. was conferred upon him at Rome. On the death of Cardinal Wiseman he succeeded him as Archbishop of Westminster (1865); Cardinal (1875). Besides numerous volumes of sermons, he has written a large number of works bearing on the doctrines of the Church of Rome and their connection with civil society, "The Temporal Power of the Pope," in reply to Mr. Gladstone's "Exposition," as to the Vatican Decrees (1875); "The True Story of the Vatican Council," published in the *Nineteenth Century*, etc.

Manns, August. Distinguished orchestral conductor, b. near Stettin, in Prussia, 1825. He was in early life an orchestral player and bandmaster of a popular winter garden, then of a crack regiment. Became musical director of the Crystal Palace (1855). The celebrated Crystal Palace Saturday Concerts, and the almost unrivalled orchestra, were organised by him. Daily concerts of the highest class of orchestral music, and weekly grand concerts, occasionally with chorus, always with the best soloists, vocal and instrumental, were instituted. He may claim to have made known as orchestral writers Schubert and Schumann, and to have made popular the greatest works of Berlioz and other composers. Operas of all kinds and grand musical dramas are also to be heard frequently at the Crystal Palace. Both at the Handel Festival of 1883, on the occasion of Sir Michael Costa's illness, and also in 1885, Mr. Manns conducted. Since 1879 he has directed an annual Christmas concert series at Glasgow.

Manor. A manor is a territorial division derived from feudalism. Concerning its origin and the details of its organisation there

prevails much dissension among scholars and antiquaries. It took shape at a time when law and custom were hardly to be distinguished. Each manor had its own customs; so that of the thousands of manors existing in England no two are exactly alike. The manor superseded in a great degree the township, which some have traced back to the village community, and which at all events was the unit of property and administration in early English times. Each landowner of the township had possessed in severalty his homestead, and perhaps some land with it. But the greater part of the land, arable and pasture, was held by the landowners in common. Each township had its court, its officers, and its administrative machinery, and sent representatives to the Courts of the Hundred and the County. By steps which are now very obscure the township came to have a feudal lord, the lord of the manor. Part of its land became his demesne, cultivated by his villeins for his benefit; part remained in possession of his tenants. The villeins had no property of their own, and were usually attached to the soil, but were protected in their lives and in their domestic rights. The free tenants were practically owners of their tenements, subject to the performance of feudal service and payment of feudal dues. The villeins gradually acquired an interest in the land, and became copyholders. (See COPYHOLD.) The free tenants in many instances became the yeomen and freeholders of later days. The manor had its civil courts: the Court Baron for the freeholders, in which the free tenants were judges; and the Court (since called Customary) for the villeins, in which the lord or his steward was sole judge. It had also a criminal court, the Court Leet. This, and the Court Baron, and many other features of the manor, came down almost unchanged from the earlier township. Lawyers are incorrect in asserting that the manor was a sudden creation or altogether the result of the Norman conquest. By a statute of the 18th year of Edward I. (1290) restraints were placed upon subinfeudation which rendered it impossible to create any more manors. Every manor now existing must, therefore, be at least 600 years old. At the present day the lord of the manor receives from its freehold tenants a merely nominal rent or service. From the copyhold tenants he receives more, but copyholds are in course of enfranchisement, and in many manors no copyhold land can be found. His rights over the waste of the manor, almost the only common land remaining, are still important. Others have rights over it, but he is its owner. The courts of the manor have long since either vanished or become formal. (See Stubbs' "Constitutional History of England," and generally the writings of Sir Henry Maine and Mr. Elton; Scriven on "Copyholds"; Williams' "Principles of Real Property.")

Manor, Lord of. See LAND QUESTION, THE, and MANOR.

Mansfield, William David Murray, 4th Earl of (creat. 1792); b. 1806; succeeded his father 1840. Is hereditary Keeper of the Palace of Scone; was M.P. for Aldborough (1830), for Woodstock (1831), for Norwich (1832-37), and for Perthshire from that date till 1840; was a Lord of the Treasury (Dec. 1834 till April 1835). The 1st peer was cupbearer to James VI. The celebrated Judge Mansfield was the 1st Earl.

Manlaughter. See CORONERS' INQUESTS (APPENDIX).

Manteuffel, Field-Marshal (in the German army), b. 1809; entered the army in 1827, where he made very rapid advancement. In January 1864 he was sent to Vienna to propose energetic war measures with respect to the Elbe Duchies. The following month he was sent into Schleswig-Holstein, and took part in several actions. He next participated in the Austro-Prussian war, and at the close of the operations was sent to St. Petersburg to obtain the recognition by the Russian Government of the results of that war. He rendered brilliant service in the struggle with France, and cut the communications of General Bourbaki's army, resulting in its being driven on to Swiss territory. Field-Marshal Manteuffel was appointed Governor-General of Alsace-Lorraine in 1879, a position he held till the time of his death (June 17th, 1885).

Manures. The object of applying manure in any form to the land is to add to it those ingredients of which it stands in need as regards the requirements of the crop which is to be grown. Manures, generally speaking, are composed of animal, vegetable, and mineral matter; and by the decomposition promoted through their contact with the soil, air, and moisture combined, are generated those gases which dissolve and liberate plant-food, not only in the manure, but in the soil itself. Manures are termed general and special. A **general manure**, of which farmyard manure is the type, supplies all the constituents of plant-food; a **special manure** furnishes, in a more or less concentrated form, some particular constituent of which the soil or crop to be grown is in need, such as guano, bone dust, and nitrate of soda. It restores the balance of constituents where an excessive demand has been made on one element by any particular crop. Hence the persistent application of a special manure, in the absence of manures of a more general character, would lead to infertility. Guano furnishes, it may be said, the nitrogen; bone manures the phosphoric acid; and sulphate of potash the potash, of which the bearing soil requires most. Besides supplying food for the growth of the plant, all manures stimulate those chemical changes which render soluble, and available for assimilation by the plant, a portion of the constituents of the soil. Farmyard manure, which consists of the dung, urine, and litter of animals, has in addition to a chemical, a mechanical effect. It renders stiff soils more porous and easily worked. This typical general manure has not, however, always the nutritive constituents in the proportion in which they are most required by the soil for the growth of certain crops. Hence farmyard manure is applied with increased beneficial effect in conjunction with special or artificial manures. The valuable substance returned to the soil in least quantity by farmyard manure is phosphoric acid: yet this is often the ingredient most required by the soil, as it is taken away in large measure in the grain of wheat, barley, and oats, and in the bones of the growing animals on the farm. **Superphosphate** is a phosphatic manure, and is bones dissolved by means of sulphuric or other strong dissolving acid. Farmyard manure is applied on the stubble, in the autumn, to grass land, and to the clover lea after wheat. **Green**

manures, also regarded as general manures, are obtained by the ploughing in of buckwheat, rye, rape, vetches, white mustard, and clover, which all enrich the soil to the extent only of the food which they derive from the atmosphere. **Composts**, another form of general manure, are a mixture of road scrapings, cleanings of ditches, weeds, leaves, lime, with an addition, sometimes, of some farmyard manure. The folding of sheep on turnips, or fodder crops, is a means of manuring; and the effect in this instance is greatly increased when the food of the sheep is enriched by the addition of cake and meal. Lime is applied, generally in its caustic state, to land, because of its power to stimulate the decomposition of vegetable matter in the soil. It sweetens or neutralises the effects of injurious combinations in the soil; it also checks the spread of insects and the growth of weeds. There are three classes of **special manures**—(1) **Nitrogenous** manures, such as ammoniacal guanos, nitrate of soda, sulphate of ammonia, applied with most benefit to cereal crops; (2) **Phosphatic** manures, such as the phosphatic guanos, superphosphate, dissolved bones, crushed bones, bone meal, bone ash, applied with most beneficial results to grass lands or pastures which have been grazed by young or dairy stock; (3) **Potash** manures, such as nitrate of potash, nitrate of soda, muriate of potash, and kelp, which contain constituents largely required by root crops. Generally speaking, the commercial as well as the economical value of any manure depends upon the quantity of nitrogen, phosphoric acid or potash (especially the two former) which they contain, in that soluble form only in which the plant can avail itself of the stores of food around it. Common salt is applied as a top dressing to check the over-stimulating effects of nitrate of soda. Rape dust, cotton-cake dust, malt dust, blood, and soot, are sometimes applied to the land, for the sake of the nitrogen which they contain. Soot is also applied for the purpose of destroying slugs.

Manvers, Sydney William Herbert Pierrepont, 3rd Earl (creat. 1806); b. 1825; succeeded his father 1860. Was M.P. for South Notts (July 1852 till his succession to the peerage).

Maories. The name of the aborigines of New Zealand. They are of Polynesian race, and are brave and warlike in nature. They are gradually approaching extinction; the entire Maori population, according to a census taken in 1881, being only 44,097. Formerly they were noted for their ferocity and cannibalism; now they profess Christianity, and show a great aptitude for acquiring the customs of civilisation. Although the Maories still practise tattooing, they exhibit a fancy for wearing European clothing. In 1840 an assemblage of chiefs acknowledged the supremacy of Britain. This arrangement was not ratified by some of the tribes, and frequent rebellions were the consequence, the most serious occurring in 1863-64. After that period their attitude became so pacific that the British troops were withdrawn from New Zealand in 1869. In 1884 the Maori king, attended by one or two prominent fellow-countrymen, visited England in connection with the redress of alleged remaining grievances.

Mappin, Mr. Frederick Thorpe, M.P., was b. 1821. Educated in Sheffield. He and his sons are sole owners of the firm of Thomas Turton

& Sons, Sheaf Works, Sheffield. J.P. for the West Riding and the borough of Sheffield, of which town he has been Mayor and Master Cutler. He is a director of the Midland Railway and the Bridgwater Navigation Co. Returned in the Liberal interest as member for West Riding, Hallamshire Division (1885).

Mar, John Francis Erskine Goodeve Erskine, 11th Earl of (creat. 1402), was b. 1836; succeeded to the earldom 1866. Elected a representative peer for Scotland (March 1886).

Mar and Kellie, Walter Henry Erskine, 11th Earl of Mar and 13th Earl of Kellie (creat. 1565); b. in India 1839; succeeded his father in the earldom of Kellie 1872. Was elected a representative peer for Scotland (Dec. 1876). The 5th Earl of Erskine, who (would have been the 6th Earl of Mar of the old creation, but) was the first possessor of the title of Mar, conferred by Queen Mary, was elected Regent of Scotland (1571). The 6th (of this new line) was the Earl who took an active part in the rising of 1715.

March, The Earl of, M.P., eldest son of the Duke of Richmond and Gordon, was b. 1845. Educated at Eton. Lieut.-col. 3rd and 4th Battns. Royal Sussex Regt. Formerly an officer in the Grenadier Guards. He is Deputy Lieutenant and J.P. for Sussex and Banffshire. Returned in the Conservative interest as member for West Sussex (1869-85); South-West Sussex (1885).

Mariette, M. See BIBLICAL ARCHÆOLOGY.

Marine Biological Laboratories. Institutions on the sea-shore, provided with boats, fishermen, dredging apparatus, tanks, scientific instruments, and scientific men. Their object is the study of sea-forms of living things, for the twofold purpose of gaining information as to the habits of fish, and extending our knowledge of marine zoology and botany. They are thus of commercial and scientific importance. On the Mediterranean and American coasts several laboratories are in existence. Of the Mediterranean ones the most important is that of Naples, founded by Dr. Dohrn. Its cost has been about £20,000, and its annual expenses are about £4,000. The **United States Fish Commission** have erected several small laboratories, and are now laying out £10,000 on one at **Wood's Hole**, and £20,000 on fishponds protected by piers of masonry. This Commission has received in all from the imperial revenue some £300,000. An association known as the **Marine Biological Association** has been founded in England. Its president is Professor Huxley; its secretary, Professor Ray Lankester. The British Association granted it £150, and altogether some £8,000 have been raised. A yearly subsidy is promised by Government, and a site for the laboratory granted at **Plymouth**. The building is already in course of construction.

Marine Insurance in 1885. There is nothing, perhaps, more difficult than to convey in a short sketch the fluctuations of business at Lloyd's during the year 1885. To do so would be to write a volume of little or no interest to the general reader, and of but little value to the expert. There are, however, some salient points worthy of mention, because they bear upon large problems which have been much discussed in the past and which will certainly be much debated in the future. The first of these is **loss of life at sea**. It is impossible for some months to come to state the exact figures—so dilatory are the movements of the Board

of Trade—but the underwriter is too well aware that almost every one of the principal steamship lines have had at least one loss to record in 1885. Many of these lines, however, have become their own underwriters, and for a very obvious reason. It is not so much that they wish to keep in their own hands the large premium income they would otherwise pay away, as from the fact that it is hardly fair to write at the same rate of premium a Peninsular and Oriental steamer and a cargo boat from the Tyne. An attempt was made during the past twelve months to get over this difficulty, and to institute some kind of a classification for steamers of different classes, but in practice the thing is exceedingly difficult. It is scarcely true, by the way, that cargo boats are at present systematically over-insured, whatever may have been the case in past times. The freight market has been so completely demoralised in consequence of over-production of tonnage—as we have explained elsewhere—that expenses have to be cut down to the lowest point; and although it might seem at first sight that the insurance of a vessel ought to be the last item to cut down, experience shows that in practice steamers are, if anything, under-insured—a conclusion justified by the investigations that have taken place in 1885 in the Wreck Commissioners' Court. The over-production of tonnage of which we have spoken, followed by stagnation in the freight market, has had the natural effect of leading to severe competition for business at Lloyd's, and rates have fallen in consequence. In no case was there a rise during the year, whilst almost everything shows some reduction in price, owing to the small amount of general business doing. For purposes of reference we append some of the principal rates. Take for instance:—

INDIGO by Steamers, Calcutta and Madras to London.

1884.	1885.
Outside boats . 20s.	Outside boats . 15s.
Smith's " . 15s.	Smith's " . 10s.
P. and O. " . 10s.	P. and O. " . 7s. 6d.

Steamers for time generally reduced.

Say those done in 1884 at 10 gs., in 1885 at 9 gs.

" " " " 9 "	" " " " 8 "
" " " " 8 "	" " " " 7 1/2 "
" " " " 7 "	" " " " 6 1/2 "

New Zealand Steamers.—1884, 40s.; 1885, 37s. 6d.

Goods by Baltic Steamers, Hull to Reval, etc.—1884, 35s.; 1885, 25s.

Homewards.—1884, 40s. to 50s.; 1885, 30s. to 35s.

COTTON.—Alexandria to Liverpool.—1884, 7s. 6d. to 6s. 8d.; 1885, 6s. 3d.

GRAIN.—Odessa to United Kingdom.—1884, 40s.; 1885, 30s. to 35s.

GOODS.—Clyde and Liverpool to Calcutta and Bombay, by "Clan" steamers.—1884, 12s. 6d. to 15s.; 1885, 10s.

By "Smith" City Line.—1884, 10s.; 1885, 8s. 9d.

Goods and Packages by Holt's Steamers from Liverpool to Rio de Janeiro, etc.—1884, 7s. 6d.; 1885, 6s. 8d.

Coasting rates were nearly all reduced.

Passing to what we may call the politics of Marine Insurance, we may observe that underwriters have exerted themselves most strenuously during the past year to deal practically

with the much vexed question of whether a uniform bill of lading is possible, but little or no substantial progress has been made. The year has been marked, too, by a larger use of what are known as "Lloyd's Clauses," particularly in London, Liverpool, and Glasgow. These clauses are so important, and they are passing into such general use in contracts for marine insurance, that we append them, with the remark that although a bill of lading whose terms shall be absolute and unvarying is probably an impossible dream, the increasing adoption of Lloyd's clauses shows that this is not the case with contracts of marine insurance.

LLOYD'S CLAUSES.

F.P.A. Warranted free from particular average unless the vessel or craft be stranded, sunk, or burnt, each craft or lighter being deemed a separate insurance. Underwriters, notwithstanding this warranty, to pay for any damage or loss caused by collision with any other ship or craft, also to pay any special charges for warehouse rent, re-shipping, or forwarding, for which they would otherwise be liable, and to pay the insurance value of any packages which may be totally lost in transshipment. Grounding in the Suez Canal not to be deemed a strand, but underwriters to pay any damage or loss which may be proved to have directly resulted therefrom. G. A. General Average and salvage charges payable according to foreign official adjustment, if so claimed, or per York-Antwerp Rules, if in accordance with the contract of affreightment. F., C. and S. Warranted free of capture, seizure, and detention, and the consequences thereof, or of any attempt thereat, piracy excepted, and also from all consequences of hostilities or warlike operations, whether before or after declaration of war. Deviation. In the event of the vessel making any deviation or change of voyage, it is mutually agreed that such deviation or change shall be held covered at a premium to be arranged, provided due notice be given by the assured, or receipt of advice of such deviation or change of voyage. Continuation Clause (Ship or Ships Policies). In the event of any shipment coming upon this policy, the value of which is in excess of the sum then remaining available, it is mutually agreed that the underwriter shall grant a policy for such excess up to, but not beyond the amount of this policy, and the assured shall pay the premium thereon at the same rate. Continuation Clause (Time Policies). Should the vessel hereby insured be at sea on the expiration of this policy, it is agreed to hold her covered until arrival at port of destination at a premium to be arranged, provided due notice be given on or before the expiration of this policy. No Thirds as applying to Iron Ships and Steamers. No thirds to be deducted except as regards hemp, rigging, and ropes, sails, and wooden deck. Lloyd's Warranties. Warranted not to sail from the Baltic, White, or Black Seas, or British North America, between the 1st day of October and the 1st day of April, nor from the West Indies or Gulf of Mexico between the 1st day of August and the 12th day of January, nor to go to the Azores, nor to sail the Baltic before the 20th day of March or after the 10th day of September. M. C. Warranted free from particular average below the load waterline, unless occasioned by fire or contact with some substance other than water.

Marjoribanks, The Hon. Edward, M.P., eldest son of the first Lord Tweedmouth, was b. 1849. Educated at Harrow and Ch. Ch., Oxford. Called to the English bar at the Inner Temple (1874). Married (1873) Lady Fanny, third daughter of the late Duke of Marlborough, K.G. J.P. for Inverness-shire and Berwickshire. Returned in the Liberal interest as member for Berwickshire (1880-85); re-elected 1885. Holds the office in the present Gladstone administration of Comptroller of the Household.

"**Mark.**" See LAND QUESTION, THE.

"**Marked Unionists.**" See TRADES UNION.

Market Gardens. See FRUIT FARMING.

Markham, Commander. See ARCTIC EXPLORATION.

"**Markham, Mrs.**" See NOMS DE PLUME.

Marlborough, George Charles Spencer-Churchill, 8th Duke of; b. 1844; m. (1869), Lady Albertina Frances Anne Hamilton, dau. of the 1st Duke of Abercorn, K.G.; succeeded his father 1883. Is Prince of Mündelheim, in Suabia, "of the Holy Roman Empire of German nationality." The 1st Duke was the celebrated military commander; a pension of £4,000 and the estate of Blenheim was settled on the family by Act of Parliament. The 7th Duke was successively Lord Steward of H.M.'s Household, Lord President of Council, and Viceroy of Ireland.

"**Marlitt, E.**" See NOMS DE PLUME.

Marriages Legislation Bill, 1885. Provides that no marriages celebrated before or after the passing of the Act shall be deemed invalid only because of any want of lawful authority for the grant of any license or certificate by any person acting as a public officer entitled to grant such license or certificate, or for the solemnisation of marriages in the place used, or by the person officiating, or because of any irregularity in the publication of the banns, etc., unless such want of authority or such irregularity was at the time known to both the parties to such marriage.

Married Women's Property Act, 1882. A short historical preface is necessary to the explanation of this Act. At common law the husband and wife were regarded as one person. By marriage the woman was merged in the man. He became entitled to all her personal property and to the rents and profits of her real property. He also became answerable for her debts. In equity a married woman was always regarded as capable of holding property, and the word and thing "separate estate" owe their origin to the Court of Chancery. The chief sources of the separate estate have been settlements, devises and bequests to the separate use of married women. Over this separate estate the married woman enjoyed all the rights of an owner, save that in gifts to her separate use it has always been usual to insert a proviso against anticipation of income. This anomalous proviso has been enforced by the courts upon a consideration of the strong pressure which may be put upon a married woman improperly to anticipate her income. In this way the common law became in a great degree obsolete in so far as it affected women of the richer class, who have been almost invariably protected by settlements. But it continued to press hardly upon married women in other classes; and the Married Women's Property Act 1870, amended by the Married Women's Property Act 1874, was designed to protect married women in the

enjoyment of several important kinds of property. Both of these Acts have been repealed by the Married Women's Property Act 1882, the effect of which may be summed up by saying that it almost altogether annuls the effect of marriage upon a woman's right of property. In the case of all marriages contracted after the last day of 1882, the married woman, the *feme covert*, has the same rights of acquiring, holding and transmitting property which are possessed by the spinster or widow, the *femme sole*, or by the man. In the case of all marriages contracted before that day the married woman has the same rights in reference to all property accruing to her after that day. In respect of her separate estate the married woman has all the means of redress by civil or criminal proceedings which are enjoyed by any other owner of property. She is also liable in every respect as though she were unmarried; she is liable for her ante-nuptial debts, and to the parish for the maintenance of her husband and children. Such, subject to judicial construction, is the general effect of this statute. It provides no restraint upon the anticipation of her income by a married woman; nor does it annul such restraint, thus leaving marriage settlements nearly as useful as ever. It provides that money lent by the wife to the husband shall in the event of his bankruptcy be treated as assets, and shall not be recoverable by the wife until all other creditors have been satisfied. It does not allow husband or wife to take criminal proceedings against each other so long as they are living together. It protects as a trust in favour of wife and children a *bona-fide* insurance by the husband of his life for their benefit, and a similar insurance by the wife.

Marriott, Mr. W. T., Q.C., M.P., P.C., was b. 1834. Educated at St. John's Coll., Cambridge. Called to the bar at Lincoln's Inn (1864); created Q.C. (1877); Bench of his Inn (1879). Appointed Judge-Advocate-General (1885). Returned in the Liberal interest as member for Brighton (1880-84); accepted the Chiltern Hundreds (Feb. 1884); elected in the Conservative interest as member for Brighton (1884-85); re-elected 1885.

"**Marryat, Florence.**" See NOMS DE PLUME.

Mars. See ASTRONOMY.

Marton, Major G. B. H., M.P., was b. 1839. Educated at Trinity College, Cambridge, where he graduated with honours. Major 3rd Battalion Royal Lancaster Regiment. J.P. and Deputy-Lieutenant for Lancashire and Westmoreland. High Sheriff of Lancashire (1877). Returned in the Conservative interest as member for North Lancashire (Lancaster Division) 1885.

Marum, Mr. Edward Purcell Mulhellen, M.P., B.A., LL.B., was b. 1829. Educated at Carlow Coll., and University of London. Called to the Irish bar (1846). He is J.P. for Queen's County and Co. Kilkenny. Returned as a Nationalist for Kilkenny (1880-85); North Kilkenny (1885).

"**Marvel, I. K.**" See NOMS DE PLUME.

Marvin, Charles, author, traveller, and journalist, was b. 1854. Spent his youth in Russia. On returning to England (1875) devoted himself to literature and entered the Civil Service, from which he retired in consequence of the disclosure of the Anglo-Russian Agreement at the Foreign Office (1878).

Despatched (1882) by Mr. J. Cowen, M.P., on a mission to Russia, and published the result in a work entitled "The Russian Advance towards India." Accompanied the English mission to the Czar's coronation (1883). Visited the Caucasus and Caspian. In company with Arminius Vambéry lectured in the chief towns of England. Has written many works and pamphlets on Central Asian and Anglo-Russian questions, among which may be mentioned "The Russians at the Gates of Herat," and "Reconnoitring Central Asia."

Mason, Mr. Stephen, M.P. Formerly Chairman of the Glasgow Chamber of Commerce. Returned in the Liberal interest as member for Mid Lanarkshire (1885).

Masons, The Worshipful Company of. See CITY GUILDS.

Mass, Days of Attending. See DAYS.

Massereene and Ferrard, Clotworthy John Eyre Foster-Skeffington, 11th Visct. (creat. 1660 and 1797); Baron Oriel (1821), by which title he holds his seat in the House of Lords; b. 1842; succeeded his father 1863. The 1st peer, Visct. Massereene, was an active promoter of the Restoration of Charles II. The 1st Lord Oriel was the last Speaker of the Irish House of Commons.

Massoretic Text. See REVISED BIBLE, THE.

Massy, John Thomas William, 6th Baron (creat. 1776), was b. 1835, and succeeded to the title 1874.

Master and Servant. Servants are practically of two kinds—domestic servants or menials (Lat. *intra mœnia*, within the walls), and labourers or workmen employed with a view to profit. Domestic servants, in the absence of express stipulation, are understood to be hired for the year, subject to a month's notice by either party. They are entitled to proper lodging and food, but not, as a rule, to medical attendance. Illness and consequent incapacity to work does not render them liable to be dismissed without notice; but wilful neglect or disobedience does. On leaving service they cannot claim a character from the employer, or obtain damages for an unfavourable character which he may give *bonâ fide* to a person having a right to ask for information. But they can obtain damages for an untrue character maliciously given. The relation between employers on the one hand, and on the other hand labourers or workmen, has been regulated by many statutes. In the first place the employer in getting servants must not transgress the Factory or Elementary Education Acts. In the next place the *Truck Act* compels the employer in all the more important trades to pay his workmen in current coin, and not otherwise; and an *Act of 1883* forbids him to pay his workmen in any premises used for the sale of intoxicating liquor. Thirdly, a variety of Acts give to the county courts and to the justices a certain jurisdiction in disputes between employer and workman, and provide for the appointment, by consent of both parties, of arbitrators and boards of conciliation, whose awards the law will enforce. As a rule, breach of the contract of service by either party now gives ground for a civil action only. But as regards merchant seamen, the captain, the employer's agent, is necessarily invested with extraordinary powers of discipline. A work-

man is criminally liable for a wilful breach of contract in cases where he has reasonable ground to believe that the result of such breach would be to stop the public gas or water supply, or to occasion serious injury to life or property. But in the prosecution of a trade dispute any number of persons may combine to do anything which, if done by one person, would not constitute a crime. A master is not criminally liable for any act of his servant; but he is civilly liable for everything done by his servant in the course of service. A master is now civilly liable to one servant for injuries inflicted by the negligence of another servant (see EMPLOYERS' LIABILITY ACT). A master may bring an action for any injury done to his servant whereby he loses the benefit of the service—*e.g.*, an assault, a seduction, etc. A master may justify an assault committed in defence of his servant, and *vice versâ*. A master may maintain, *i.e.* aid and abet, his servant in an action—a thing generally unlawful. If any one wilfully entice a servant to quit his master's service, the master has an action against him and the servant. Formerly it was only by apprenticeship that persons could qualify themselves to exercise a trade. But at the present day the necessity of serving an apprenticeship survives only in the city of London. The apprentice was an infant bound out by indenture for so many years to serve a master, who undertook to maintain and teach him, and exercised over him a parental authority. The children of parents unable to maintain them may still be apprenticed till the age of twenty-one years by the guardians or overseers to persons willing to take them. In all cases the infant's consent is necessary.

Master of Faculty. See DEANS.

Master of the Rolls. See ROLLS.

Mather, Mr. William, M.P., was b. in Manchester, 1838. Educated in England and at Dresden. Connected in early life with the Salford Ironworks. Ex-president of the Manchester Reform Club and Salford Lib. Assoc. Is a J.P. for the borough of Salford. Returned in the Liberal interest as member for South Salford (1885).

Mathew, Father. See TEETOTALISM.

Mauritius. See BRITISH COALING STATIONS.

Maxwell, General Edward Herbert, C.B., d. March 6th, 1885. He was b. 1822; entered the army (1839), and served with the 88th regiment in the Crimean campaign, taking part in the battles of the Alma and Balaclava and the siege and fall of Sebastopol. He was engaged in the famous attack on the Quarries on June 7th, and in the two assaults on the Redan. He brought the 88th out of action, for which service he received a medal with three clasps. General Maxwell served also during the suppression of the Indian mutiny, including the operations at Cawnpore and the sieges of Lucknow and Calpee.

Maxwell, Sir Herbert Eustace, Bart., M.P., son of the late Sir William Maxwell, sixth baronet, of Monreith, Wigtownshire, was b. 1845. Educated at Eton, and Ch. Ch., Oxford. Capt. Royal Ayr and Wigtown Militia. Deputy Lieutenant and J.P. for Wigtownshire. Returned in the Conservative interest as member for Wigtownshire (1880-85); re-elected 1885.

May Laws. See GERMANY and GERMAN POLITICAL PARTIES.

Mayne, Mr. Thomas, M.P., was b. 1832. Educated at the Royal College of Science, Dublin. Formerly a member of the Municipal Council, Dublin, and Chairman of the Finance and Leases Committee of the Corporation. He is now a member of the Port and Docks Board of the city. Returned as a Nationalist for Co. Tipperary (1883-85); re-elected, Mid Tipperary (1885).

Mazar-i-Sherif. See BALKH.

"M. C." See MARINE INSURANCE.

"Mean Noon." See PRIME MERIDIAN AND UNIVERSAL DAY.

Meat Supply, Our. It has only been within the last seventeen years that any accurate data have been available for contrasting the number of meat-producing animals in the United Kingdom with the increase of our population. During the past ten years the population has increased nearly 11 per cent., whereas the meat-producing animals have declined about 8·25 per cent. In 1874 the total number of animals available for food in the United Kingdom was 48,655,987, while in 1885 the number returned was 44,641,588, or 1·24 per head of population. The number of animals slaughtered every year in Great Britain is estimated at 25 per cent. of the entire herd of cattle, and 42 per cent. of the sheep. The average quantity of beef produced annually from the herds in Great Britain, and the cattle imported from Ireland, may be taken at about 9,294,000 cwt., or 80·31 per cent. of our total supplies. Our flocks produce about 5,328,000 cwt., including the Irish sheep, or 92·3 per cent. of the mutton supplies. The number of swine in Great Britain amounted to 2,403,380 in 1885, which is 19,452 less than the number returned in 1874. (These figures are exclusive of the pigs kept in towns, and by cottagers with less than a quarter of an acre of land.) The supplies annually obtained from Ireland number about 460,000, which come either as fat or store swine. As regards the imports of live animals, we draw our chief supply of cattle from America and Canada, while Holland, Denmark and Germany send us the bulk of our sheep. During the last two years, however, there has been a falling off in these supplies, through the restrictions placed upon animals coming from countries where disease was prevalent. The consequence has been that the imports of dead meat have considerably increased. Before the year 1876 the quantity of fresh beef received into this country did not exceed 55,000 cwt. per annum, whereas last year the total quantity amounted to 902,189 cwt., 96 per cent. of which came from America, or nearly double the quantity that was shipped in 1882. Our mutton supplies have undergone a similar change. In 1882 the total number of sheep received from abroad was 1,124,367, whereas last year the number had receded to 750,927. Before 1882 there were no separate records kept of the imports of fresh mutton; but in that year the quantity was returned as 188,656 cwt., and last year (1885) it increased to 502,374 cwt. Of this amount about 60 per cent. is due to the importation of frozen meat from our colonial possessions. This trade commenced in 1880, with a shipment of 400 carcasses of sheep from Australia. Two years later New Zealand commenced to export, with a consignment of 8,839 carcasses; and since then the frozen meat trade has assumed very large proportions, for South America, seeing an

outlet for her produce, commenced to send mutton in 1884. Last year (1885) New Zealand exported 475,133 sheep, South America 243,955, and Australia 92,107. Australasia and the River Plate have thus become the chief sources from whence we get our mutton. We obtain a fair proportion from Holland and Germany, but the Continental trade has been somewhat affected by the frozen meat trade. Although we import annually large supplies of live animals and fresh meat, over 80 per cent. of the food consumed by our population is raised in the United Kingdom. As regards pig meat, we get the bulk of our supplies from America, our indebtedness to her for bacon alone comes to over £4,000,000 per annum. Our Australasian colonies send us large quantities of preserved meats, but the greatest amount comes from the United States. The total value of our imports of living animals for food purposes amounts to about £10,000,000 per annum, and the value of the dead meat is estimated at about £15,000,000, or a total of £25,000,000 for the entire foreign meat supply.

Meath, William Brabazon, 11th Earl of (creat. 1627); Baron Chaworth (1851), by which title he holds his seat in the House of Lords; b. 1803; succeeded his father 1851. Was M.P. for co. Dublin (1837-41). The family is descended from Jacques le Brabazon, whose name appears on the roll of Battle Abbey.

Mechanical Theory of Heat. Whenever heat disappears during the production of any of its effects (see HEAT), the matter operated upon is found to have acquired the power of overcoming resistance, of doing work—it has acquired energy of some kind. Similarly, whenever work is done and the energy used up, heat is generated. Assuming that energy is indestructible, and that matter cannot be created, heat must be, not a kind of matter, but a condition of matter—a form of energy. The quantity of heat generated by the using up of definite quantities of mechanical energy—the falling of a known mass through space, or the friction of two bodies—has been measured with great accuracy by Joule, who finds that the energy of a mass of one pound which has fallen through a height of 772 feet is equivalent to the quantity of heat required to raise the temperature of a pound of water one degree Fahrenheit. The quantity of work required to raise a mass of one pound 772 feet, against the force of gravitation, is the same as that required to raise 772 pounds only one foot against the same resistance; this quantity is called 772 foot-pounds of work. Hence, 772 foot-pounds of work will generate one unit of heat. This is called the **Mechanical Equivalent of Heat**, and the statement of this relationship between work and heat is the first law of Thermodynamics.

Medhurst, Sir Walter, d. Dec. 26th, 1885. He passed thirty-seven years of continuous labour in the trying climate of China, from the early days of our first struggle with the Celestial Empire. He was appointed, in 1843, interpreter at Shanghai, and from that date to the end of his service he was actively employed as Vice-consul and Consul at several ports. From 1850 to 1853 he acted as Secretary and Registrar to the Plenipotentiary and Chief Superintendent of Trade. As Her Majesty's Consul at Shanghai his services were so fully appreciated that on his retiring the whole foreign community

joined in presenting him with a service of plate.

Medical Attendance Association. See FIRE AND LIFE INSURANCE.

Medical Relief Disqualification Removal Act, 1885. The occasion for this Act was in the passing of the Representation of the People Act of the same year, which assimilated the borough and county franchises. It was found that in rural districts many persons who would otherwise have obtained the franchise under that Act were regular recipients of medical relief given by the poor-law authorities, and would be disqualified from voting by the rule until then maintained, that by receipt of poor-relief within a certain time of the elections an elector lost his right to vote. The Act therefore provides that no person shall lose his right to be registered or vote at any parliamentary or municipal election because he has received for himself or his family any medical or surgical assistance, medicine, etc., at the expense of the poor-rate.

Meeting of the Three Choirs. See MUSIC FOR 1885.

Meisenbach Process. See ENGRAVING, AUTOMATIC.

Meissonier, Jean Louis Ernest, a French painter, b. at Lyons, 1811. Came to Paris in 1830, to study. He made very rapid progress in his art, and being gifted with an original order of talent, he adopted a particular branch of art—namely, that of painting pictures of very small size, but remarkable for the truth and correctness of the figures, the extreme fineness of touch, and precision of detail. He sent some works to the "Salon" in 1836, which attracted much attention and won high approbation. From that time till 1855 he continued to devote himself to the small works above mentioned, imparting such truth to his figures that they almost wore the semblance of life. Théophile Gautier passed a high eulogium upon him. Besides medals which he received at different "salons," he obtained the cross of Knight of the Legion of Honour in 1845, and the grand medal of honour at the Universal Exhibition of 1855, the cross of Officer in 1856 and Commander in 1867. He was elected a member of the Academy "des Beaux Arts" in 1861. In 1864 he adopted a new branch of art, painting historic subjects in the same small dimensions. Among his famous paintings are "Napoleon and his staff, 1814," the "Battle of Solferino," etc. His latest work, the "Postilion," has recently (1885) been on view at the Winter Exhibition at the Hanover Gallery.

Melbourne. See VICTORIA.

Meldola, Professor. See EARTHQUAKES.

Meldrum, Baron. See HUNTLEY.

Melikoff, General Loris. Russian dictator and general, b. in 1824. Was commanding officer of a regiment of cavalry (1854); and in that capacity he assisted in the fall of Kars. His skill and activity secured for him the appointment of general, and subsequently he was made commander of that important town. In 1860 he became Governor in Circassia. During the Russo-Turkish war he acted as Adjutant-General to the Grand Duke Michael in Armenia, where he displayed a skill which secured success for the Russians. He narrowly escaped assassination by a Russian, Maladzytsky (1880). Considerable powers were conferred

upon him at the time of the assassination of the late Czar, by means of which he succeeded in restoring confidence to the nation when the Nihilistic propaganda had assumed disquieting proportions and was undermining the foundations of the Russian empire.

Melkite Church. See COPTIC CHURCH.

Mellor, Mr. John William, Q.C., M.P., eldest son of the late Mr. Justice Mellor, was b. 1835. Educated at Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1860); Q.C. (1875); elected a Benchers of his Inn (1877). Returned in the Liberal interest as member for Grantham (1885). Holds the office of Judge Advocate-General in the present Gladstone administration (1886).

Melville, Robert Dundas, 4th Visct. (creat. 1802); b. 1803; succeeded his brother 1876. Was Storekeeper-General of the Navy (salary £1000). The 3rd Visct. was a distinguished general officer, who served in Upper Canada, also in India at Moultan and Goojerat. Died .

Members of Parliament, Privileges of. See PRIVILEGES OF PEERS AND MEMBERS.

Memory. The earliest mnemonic writer whose system is still in use was the **Rev. Richard Grey, D.D.** He used nine vowels and nine consonants to represent the nine units, but he had little control over his figure-words. For instance, the date of the accession of George II. (1727) he expressed by the word "doi." In 1809, **Gregor Von Feinaigle** taught his system. His figure alphabet had only consonants in it, so with the help of vowels he could make his figure letters into well-known words. For instance, George II.'s date might be expressed by "conic." In the *Gentleman's Magazine* for 1811 and other periodicals of that date will be found reports of Feinaigle's lectures in London. What astonished the reporters most, was that Feinaigle exhibited, not his own powers, but those of his pupils, children aged from nine to fourteen and fifteen. **Aimé Paris** learned Feinaigle's system, slightly improved his figure alphabet, and altered his picture key. He taught those who objected to picturing to connect ideas by the aid of sentences. **François Fauvel Gouraud** learned Aimé Paris's system, and altered it a little, still retaining the fancy pictures. **Major Beniowski**, a pupil of Aimé Paris, taught mnemonics in London. His figure alphabet differs from Fauvel Gouraud's in the way he uses "w" and "x." One of his pupils, **Mr Fairchild**, slightly varied the figure alphabet. Two of his pupils—his son (the Mr. Fairchild who wrote "The Way to Improve the Memory") and **Mr. Stokes**—publish at the present time books on memory and teaching. Mr. Stokes uses pictures, like Paris, but has improved on Paris's prose sentences by using rhymes. **Dr. Pick** has taught, lectured, and written on memory. He condemns the picture-making and sentence-making of other mnemonists, but his own connections are often really similar to those of Aimé Paris. **Mr. Maclaren** has published a book on memory, in which he uses the picture method: for instance, to connect in the memory the words archer, pin, crystal, rug, back, pen, nose, he tells the pupil to imagine he can see "an archer trying to thrust a pin into a ball of crystal; he has a rug dangling down his back and a pen through his nose." All the nouns are to be remembered except ball. **Dr. Mortimer Granville**, the author

of "The Secret of a Good Memory," relies on "sight phantoms" and "sound phantoms." Sight-memory is proved by experiment to be generally stronger than sound-memory. **Professor Loissette**, who has studied mental physiology both theoretically and experimentally, discovered certain leading laws of the memory, and upon these founded a system. He has also recently discovered a device for memorising, by which it is claimed the memory and power of the will to control the attention are strengthened and improved.

Memphis. See EGYPTOLOGY.

Menabrea, General Louis Frederick, Marquis du Val Dora, b. in 1809, at Chambéry, in Savoy. He studied at the University of Turin. He began his military career in the corps of Engineers. He was soon appointed Professor of Mechanics in the Military Academy, in the Artillery School, and at the University of Turin. He became a captain in 1848, and afterwards held important appointments in the Sardinian ministry. Before the declaration of the War of Independence, General Menabrea had become a major-general, and taken part in many battles. He has since filled diplomatic posts at Vienna, at Paris, and at London. He is considered one of the most distinguished of modern Italian statesmen. He received the title of Count in 1861, and that of Marquis in 1875.

Mensievan. See GEOLOGY.

Mendip, Baron See CLIFDEN, H. G.

Menhira. See ANIMISM.

Menzies, Mr. R. Stewart, M.P., was b. 1856. Educated at Harrow and Ch. Ch., Oxford. Called to the English bar (1882). Returned in the Liberal interest as member for East Perthshire (1885).

Mercers, The Worshipful Company of. See CITY GUILDS, THE.

Merchants' Lecture, The. Was established (1672) during the reign of Charles II., by the Presbyterians and Independents conjointly, at Pinners' Hall, being supported by contributions from the principal merchants of the City of London. Its professed design was "to uphold the doctrines of the Reformation against the errors of Popery, Socinianism, and Infidelity." From Pinners' Hall it was removed (July 1778) to New Broad Street Chapel, and thence to the Poultry Chapel (1844), Weigh House Chapel (1869), and Finsbury Chapel, Moorfields (1883). The lecture is delivered every Tuesday morning (12 to 1).

Merchant Shipping Bill, 1884. This Bill was brought in by Mr. Chamberlain, then President of the Board of Trade, with the object of promoting the security of life and property at sea. It contained provisions against the recovery under a marine insurance of any sum greater than would indemnify for the loss actually sustained, or of any sum at all if the unseaworthiness of the vessel could be ascribed to her owner. It implied, in every contract of service between the owner and any officer or seamen, an undertaking by the owner that the ship is seaworthy at starting, and that all reasonable means will be taken to keep her so during the voyage. It extended to seamen the provisions of the Employers' Liability Act. It abolished compulsory pilotage. It enabled the Board of Trade to constitute districts, and in each created a local marine court consisting of the detaining officer, a

shipowner's representative, and an officers representative; the two latter chosen by the shipowners and the certificated officers of the district respectively. It abolished detention by a Government official alone, and required for that step either the concurrence of the representative of the shipowners or an order of the Admiralty Court. But the Government officer was to have power to warn owner, master, and crew, that the ship is unsafe, and such warning was to release the crew from any obligation to serve. The marine court was to inquire into shipping casualties, with the powers of investigation and report which now belong to a court of inquiry. From its decision, and from that of the Wreck Commissioner (who was to deal with the more important cases only), there was to be an appeal to the Admiralty Court. The Bill also contained important but technical clauses relating to tonnage measurement, and several miscellaneous provisions which cannot be noticed here.

Merchant Taylors, The Worshipful Company of. See CITY GUILDS, THE.

"Meredith, Owen." See NOMS DE PLUME.

Meredyth, Baron. See ATHLUMNEY.

"Merlin" (Field). See NOMS DE PLUME.

Mersey Tunnel. See ENGINEERING.

Merv. An oasis in Central Asia, situated almost midway between Meshed and Bokhara, and Herat and Khiva. In ancient times the city of Merv, now in ruins, was famous for its vast size, magnificence, and prosperity. The locality recently became notorious, when Russia, having conquered Khiva in 1873, threatened to occupy the oasis. The Merv question then arose, and lasted ten years. During this period English opinion strongly resisted the proposed annexation, and able strategists insisted on its value as the key of Herat. As this title is disputed by some, the case may be thus briefly stated. In 1873 the Russian advance was confined solely to the Turkestan side of Central Asia; therefore a force operating from Khiva or Bokhara would have first to conquer Merv before attacking Herat. Its convenience as a place for camping concentration, with a water-way stretching to within a few marches of Herat, thus incontestably constituted it the key of the Afghan stronghold. In later years, however, Russia began a fresh advance from the Caspian, and Skobelev having conquered Geok Tepé in 1881, the easier road to Herat was no longer through Merv, but *via* Sarakhs, and thus Sarakhs in turn became the key of Herat. How correct Generals Valentine Baker and Sir Charles MacGregor were in bestowing these appellations became apparent in 1885, when the Russians, having occupied Merv and Sarakhs, threw forward forces with such rapidity towards Herat that, had the British mission not been present, Herat would have probably been carried by a *coup de main*. The oasis has an area of 1600 square miles, and a population of a quarter of a million Turcomans. There is no town of Merv; the thickly packed prosperous settlements spread over the oasis constituting what is recognised under that name. Outside the country is not desert in the usual sense of the term, but consists of good clayey soil, which fails to grow vegetation because the water supply is too limited to irrigate it. The Russians, however, are rapidly enlarging

the cultivable area by extensive irrigation works, and have successfully introduced the culture of American cotton. The railway now being constructed under the charge of General Annenkoff, which is to connect the Caspian with the Amu-Daira, is now open as far as Askabad, and the line to Ghiaours is complete. Between Ghiaours and Merv the railway is also ready, and the line which is to connect Merv with the Amu-Daira is in progress. About 10,000 troops are maintained in the oasis, distant 200 miles from Herat, and also including its administrative area Penjeh, half that distance from the key of India. The Turcomans of Merv are considered the bravest and best mounted horsemen in Central Asia.

"Message, Royal." See PARLIAMENTARY PROCEDURE.

Metamorphism, a term used in geology to denote the changes which certain rocks have undergone, whereby their original characters are more or less obscured. Almost every rock has suffered either mechanical or chemical change, but the term "**metamorphio**" is restricted to those rocks in which the alteration has been intense. The intrusion of an igneous rock, as a boss or dyke, produces in the neighbouring strata local or **contact metamorphism**: thus it may convert sandstone into quartzite, shale into porcellanite, and limestone into crystalline marble. When the changes have affected wide areas, the phenomena are termed **regional or normal metamorphism**. The crystalline schists of the Archæan or pre-Cambrian group, as seen in parts of the Scottish Highlands and elsewhere, offer excellent examples of metamorphic rocks. Stratified rocks have been folded, cleaved and foliated, while new minerals are in many cases developed. The active agents producing metamorphism are evidently intense pressure, a high temperature, and chemical action. Shales are found to pass into cleaved slates, and these graduate into mica-schist; while it is believed that this rock may pass into gneiss, and according to some authorities into granite, or at least into granitoid rocks. Professor Frestwich has lately (1885) suggested a restriction of the term "normal metamorphism" to changes caused by heat and pressure due to depth, while he employs the phrase "**regional metamorphism**" to indicate changes produced by heat due to local compression or the crushing of parts of the earth's crust. It should be added that igneous rocks, like stratified deposits, may suffer metamorphism.

Metaphysical Society. Founded in 1869, and dissolved in 1881. Its object was the discussion of speculative theological and moral questions after the manner and with the freedom of an ordinary scientific society. Its members met once a month, dined together, and afterwards discussed a paper read by one of its members, among the principal of whom were Mr. Gladstone, Dean Stanley, Professors Huxley, Tyndall, Clifford, Lord (then Mr.) Tennyson, the Duke of Argyll, Archbishop Manning, the Archbishop of York, the Bishops of Peterborough and St. David's, the Dean of St. Paul's, Sir James Stephen, Dr. Ward (*Dublin Review*), Mr. Froude, Mr. Ruskin, Mr. Robert Lowe, Professors Maurice, Robertson, Seeley, Pritchard, Rev. Dr. Martineau, Sir J. Lubbock, Mr. Mark Pattison, Mr. R. H. Hutton (*Spectator*), Mr. Henry Sidgwick, Mr. W. R. Greg,

Mr. F. Pollock (*Saturday Review*), and Mr. J. Knowles (*Nineteenth Century*).

Meteorites. See MINERALOGY.

Meteorological Society, The Scottish. See BEN NEVIS OBSERVATORY.

Meteorology. This is the science of the atmosphere, though the study of **meteors** or shooting stars is held to belong to astronomy (*q.v.*) It is prosecuted along two separate lines of inquiry. (1) Observations are taken at each station at definite hours of local time. These are averaged to obtain means for days, months, years, etc., and the results indicate the climate of the place. This branch of the science is called **Climatology**. (2) Observations are taken at a number of stations situated over a large extent of the earth's surface at the same hour of Greenwich time. The results indicate the phenomena existing at that hour at the several stations, or the weather which prevails at each. This branch is called **Weather Study**. It is of modern origin, having arisen since the invention of electric telegraphy. To commence with the observations. The principal observations and respective instruments are as follows: Pressure of the Air (Barometer), Temperature (Thermometer), Humidity (Hygrometer, Rain (Rain-gauge), Wind (Anemometer); clouds are observed non-instrumentally. All instruments should be verified—*e.g.*, at Kew Observatory. The **Barometer** should be mercurial; in a metallic, not wooden case, provided with an "attached" thermometer, to show the temperature of the mercury. This is necessary because all readings must be reduced to same temperature (32° F.) to make them comparable with each other. Aneroid readings are, as a rule, not considered sufficiently accurate for scientific use, as the instrument is not an independent standard, but must be set to agree with a mercurial barometer. Temperature is indicated by the ordinary **thermometer**, and by **maximum and minimum thermometers** to show the extremes of temperature reached. The thermometers should be exposed in a screen or wooden cage with louvre boarded sides, with their bulbs about four feet above ground, over grass, not over bare soil. The ordinary thermometer is usually accompanied by another similar instrument, but with bulb coated with muslin, and kept damp by a few cotton threads dipping into a cup of water close by. The pair of thermometers form a **hygrometer**. The difference between the readings of dry and wet bulb gives indication of the amount of moisture in the air. Tables are published for interpreting these readings. The dry bulb thermometer and the hygrometer should be read at definite hours; the least number of daily observations admissible for a meteorological station in the United Kingdom is two—9 a.m. and 9 p.m. The maximum and minimum thermometers should be read once only in the 24 hours: best at 9 p.m.. Rain is measured by the **rain-gauge**, a can with circular funnel-shaped aperture, eight inches in diameter. It should be placed with aperture one foot above ground and away from shelter or eddies from trees or buildings. Wind is measured by the **anemometer**, an instrument provided with four cups on a horizontal cross. These revolve when the wind blows, and the distance they travel is measured by a series of counting wheels, as in a gas meter. The cups are supposed by theory to move with one-third of the

wind's velocity. The anemometer must be set up where it is well exposed and not affected by eddies. Wind is also estimated, especially at sea: **Beaufort's Scale** of 13 parts (0-12) is used (called after Sir F. Beaufort). In it 0 is a calm, 12 a hurricane. The intermediate grades are measured by the effect of wind on a ship. The wind is always given according to points of the compass, 8, 16 or 32. Clouds are classified on **Luke Howard's system** into upper and lower. Upper clouds are "cirrus" (mare's tails), "cirro-stratus," "cirro-cumulus" (mackerel sky). Lower clouds are "stratus," "cumulo-stratus," "cumulus" (woolpack), and "nimbus" (rain-cloud).—I. CLIMATOLOGY. **Temperature.** The record of this is the most important meteorological observation. It is also almost impossible to secure an absolutely correct indication, for the mode of thermometer exposure sufficing for temperate climates will not afford sufficient protection against the sun's rays in Torrid Zone. If observations are taken at regular and frequent intervals, and results entered on squared paper, the outcome will be a curve showing in general a single simple daily oscillation, the highest points in early afternoon, the lowest about sunrise. That the course of this curve, the **daily march or range** of temperature, depends on the sun, is proved thus: (a) It is not perceptible during the sunless winter of the polar regions. (b) It is obliterated by fog or heavy cloud in these islands. Diurnal range is much greater in the interior of continents than on islands and at the sea-coast: hence the terms **continental** or "excessive," and **insular** or "moderate," applied to climate. Temperature has also an annual range; it varies through the different months. Continental climates exhibit a great range, insular climates a slight range. As a rule moderate climates are much more healthy than excessive ones. If the recorded mean temperatures over the globe are laid down on charts, and the points where the values are equal are joined, these joining lines are called **isothermals**. Such isothermal charts show how in high latitudes the continents are much colder than the sea in winter and much warmer than it in summer. They show also how the east coasts of continents (Asia and North America) are far colder than their west coasts in the same latitude, especially in winter, the difference increasing with the latitude. The reasons of these differences are found in the following facts: (1) It takes much more heat to warm up a water surface than to warm up same area of land. (2) Land at the equator and sea at the poles raises the mean temperature; *vice versa*, sea at equator, land at poles lowers it. (3) Ice requires a great amount of heat to thaw it, so land surrounded by a frozen ocean does not feel the spring till very late in the year. The great agencies in raising the temperature of the western coasts are, however, the warm ocean currents setting towards them, and the warm and moist westerly winds blowing over them. The latent heat of the vapour condensed to rain also raises the air temperature. **Pressure.** Barometrical results have not so much influence on climate as the foregoing, except indirectly by affecting the winds. The barometrical daily range curve shows a double oscillation, being highest about 10 a.m. and 10 p.m., and lowest about 4 a.m. and 4 p.m. The range is greatest in the tropics, and it

disappears at the poles. At Calcutta it amounts to 0.14 in. at its greatest, in May. In the British Isles it is only about 0.02 in. In the Torrid Zone, in South America, it is so regular that you may almost set your watch by it, and any deviation from the regular curve is a sign of storm. In these islands the barometrical readings change so much from day to day that the diurnal curve is in general imperceptible on the readings of a single day, except in very calm weather. It comes out clearly on the average readings for a month. The barometrical readings are affected by the temperature of the air; as a rule the barometer is high when the temperature is low, and *vice versa*. Accordingly, as the air is elastic and flows towards any spot where the barometer is low and the pressure relatively slight, the air in the higher latitudes has a tendency to flow from the land to the sea in winter and from the sea to the land in summer. This actually happens in the Spanish peninsula. Barometer readings are very much affected by the height above sea level. Hence they must be corrected for this (**reduction to sea level**). For moderate elevations the difference is about one inch for 1000 feet. Conversely the difference in heights between two stations can be determined by comparing simultaneous readings of barometers at the two stations (**barometrical levelling**). If the difference in heights, or the distance, between the stations is considerable, the result of the calculation is uncertain, as its correctness depends on a knowledge of the exact temperature of a column of air of the same length as the difference of height between the stations, and this knowledge is unattainable. Charts showing barometric readings over the globe are called **isobaric charts**. The relation between the barometer and wind will be explained in § 2. **Wind.** The general air circulation is due to heat. Great easterly currents (**trade winds**), due in part to earth's rotation, set in both hemispheres towards the equator. The air rises there, and returns as westerly currents (**return trades**) in the temperate zone. These systems move north and south with the sun; and in southern Asia the movement is so great that the currents are quite reversed, and the wind blows for six months in one direction and six months in the opposite (**monsoons**). In higher latitudes winds are mainly regulated by distribution of atmospheric pressure. The winds are much affected by the contour of the country, and in hilly districts are purely local. The belief that some winds are dry and others wet is also only locally justified. On our east coast the heaviest rain sometimes comes with east winds, usually proverbially dry winds. **Rain.** The sun's heat evaporates water from the sea. This passes into the air. The air can only take up a certain amount, depending on its temperature. When it has taken that up it is said to be saturated. If saturated air be cooled, moisture is, so to speak, squeezed out of it; and if unsaturated air be cooled too, sufficiently, it will reach a temperature at which it will be saturated, and on being further cooled will give up moisture. This process of giving up moisture is called **condensation**. The first result of condensation is to produce fog, mist, and cloud; and further cooling causes rain, snow, or hail to fall. The ordinary mode of production of rain in nature is by the air being forced to rise. The air gets colder as we ascend at the rate of 1° F. for 300 feet; so

that air rising from the sea level to the top of the Andes, say 20,000 feet, would be cooled 66°. The air rises either by being heated and caused to ascend, or by being forced to rise over a chain of mountains or a high coast-line. Accordingly the mountainous west coasts of Europe and North America, in the region of prevalent west winds, are very wet. Mountainous regions are generally wet. Any winds from the sea usually bring rain to the first high land they meet. If the temperature is below 32° the moisture must fall in the solid form as snow. Hail is produced by greater cold, and practically never falls except with thunderstorms. **Atmospheric electricity** is generally manifested in the form of lightning, which is an electric spark. Thunder is the noise of the explosion, echoed from clouds. Lightning conductors are sharp-pointed rods or bands of copper erected above a building, attached to it and passing down into moist earth. They act by discharging the earth's electricity gradually towards the thundercloud, and so hindering the accumulation of electricity in it to such an extent that it must strike.—II. **WEATHER STUDY.** For this the barometer is the most important instrument. The wind and weather depend mainly on the difference between its readings at adjacent stations, not on its actual heights. **Guy's Ballot's Law** is, for the northern hemisphere, "Stand with your back to the wind, and the barometer will be lower on your left hand than on your right." This rule is reversed in south latitude. The wind force depends on the **gradients**, the difference in barometrical readings over a given distance. According to the above law the wind revolves against watch-hands round a region of low pressure, a **cyclonic area** or "depression," and with watch-hands around a region of high pressure, an **anti-cyclonic area**. The former may be connected with a storm, the latter never. The air flows round and into the centre of a cyclonic area, where it rises. If the gradients are steep the wind has the force of a storm. The air flows slowly out from the centre of an anticyclonic area, where it descends to the earth from the upper regions. Cyclonic areas bring warm and wet weather in winter, cold and wet weather in summer. **Anticyclones** bring frost and fog in winter, hot and dry weather in summer. **Hurricanes, Typhoons or Cyclones** are cyclonic systems of great intensity, exhibiting extreme violence, and appearing near, not at the equator. They move over the earth's surface, and in trade-wind zone advance from east to west, outside it they recurve and move from west to east. As the direction of shift of wind in these is uniform, varying only with the hemisphere, rules exist for handling ships caught in them. This science is the **Law of Storms**. In Europe generally cyclonic areas advance from some westerly point, very rarely moving from the eastward. The tropical hurricanes move slowly, but our storms move much more rapidly. This motion has nothing to do with the wind motion in the storm. In front of a cyclonic system the air is southerly, warm and damp; in rear it is northerly, cold and dry, except for some showers, often hailstorms with thunder, etc. From the fact that storms advance over the earth and give regular signs of their approach by the shifts of wind and setting-in of rain, etc., as well as by barometer readings, it is possible to issue **storm warnings**. **Weather charts** are made by putting down on a map readings taken at the same moment over

a large tract of country, and joining by lines called **isobars** the points where the readings agree. A series of such charts shows the cyclonic and anti-cyclonic systems and their motions over the earth. **Weather forecasting** is the endeavour to predict weather from existing knowledge of the movements of these systems, and of the changes of wind, etc., they will bring about.

Meteors. See **ASTRONOMY**.

Methuen, Frederick Henry Paul Methuen, and Baron (creat. 1838), b. 1818; succeeded his father 1849. A Lord-in-waiting to the Queen (1886). Descended from the Right Hon. John Methuen, Lord Chancellor of Ireland, but better known as the diplomatist who negotiated the treaty with Portugal (respecting port wine and woollen manufactures) which bears his name.

Methuen's Horse, otherwise called "The South African Irregular Force," was raised in the early part of 1885 to support the special mission of Sir Charles Warren (q.v.) in South Africa, whither he had been sent to settle a dispute with the Boers, who had invaded the protected territory of Bechuanaland, situated between Cape Colony and the western frontier of the Transvaal. The force, which was recruited mainly from retired officers from the service and young men of the middle classes, and officered by military men, was placed under the command of Colonel the Hon. Paul Methuen of the Scots Guards. Upon arriving at the Cape, they were formed into a brigade to act as mounted infantry in company with "Carrington's Horse" and the Diamond Field Corps, both of which had been raised in the Colony, together with an irregular infantry battalion and a battery of volunteer field artillery. The English volunteers were engaged for a minimum term of six months; and it was understood that, even if hostilities were averted by diplomatic means, their services would be utilised at least for that period in the performance of police duties; and that at the end of the term they would be permitted to enlist in a permanent mounted police force, to which would be intrusted the duty of enforcing respect for the provisions of the Transvaal Convention and of maintaining the British Protectorate. When Sir Charles Warren was recalled, in Sept. 1885, Methuen's Horse was practically, and has since been entirely, disbanded.

Metropolitan Anglo-Israel Association, The. See **ANGLO-ISRAELISM**.

Metropolitan Asylum District. See **ASYLUM BOARD (METROPOLIS)**.

Metropolitan Commons Act, 1866. This Act provides that from its passing (August 10th, 1866), the Inclosure Commissioners shall not entertain any application for the inclosure of a common within the Metropolitan police district as defined at that date. The lord of the manor, any of the commoners, or any local authority within whose district a common lies wholly, or in part, may present to the Commissioners a scheme for the improvement and management of a common. The Commissioners may then make such inquiry as they think proper, and draft a scheme of their own; after which they must wait two months for objections and suggestions. Then they may refer it to an assistant-commissioner, and on receiving his report may finally settle the scheme. The scheme is to

state all rights affected by it, and to provide for compensation. Any person claiming any interest or estate in the common, and dissatisfied with the scheme, may obtain a decision on his rights in an action at law. The scheme as settled is to be printed, and copies are to be sent to the memorialists, the lord of the manor, and the local authority. Each year the Commissioners must lay before both houses of parliament a report setting out every scheme certified by them in the year to which the report relates, and the schemes must be confirmed by Act of Parliament. The expenses incurred by the Commissioners on account of a scheme are to be defrayed by the memorialists, or by the local authority if willing. Rights of property over a common may be conveyed to the Commissioners for the purposes of a scheme. The Inclosure Commissioners have since been merged in the Land Commissioners.

Metropolitan Fire Brigade. See FIRE EXTINCTION.

Metropolitan Public Gardens. The invasion of bricks and mortar at almost every point of the green border-land of London, and the increasing congestion of the population within, have made the provision of Metropolitan recreation grounds necessary for sanitary, if for no other reasons. The difficulty of securing breathing spaces for the people in the overcrowded districts, however, is annually increasing; and but for the action of the **Metropolitan Public Gardens Association**, of which Lord Brabazon is the energetic chairman, would by this time probably have become insurmountable. The Association (whose local habitation is at 3, Lancaster Gate (originally consisted of only a very few members, but last year the number increased from 214 to 402. Its labours are correspondingly increasing, as will be seen from the following tabulated statement, taken from the last annual report:—

Work accomplished.	Cost.		Unsuccessful.	Work in hand.
	£	s. d.		
1882-3 . 9 ...	849	3 2 ...	6 ...	15
1883-4 . 28 ...	1159	11 3 ...	33 ...	17
1884-5 . 46 ...	6587	1 0 ...	46 ...	36
Total 83	£8595	15 5	85	

The income of the Association in 1884-5 was raised from £1,278 1s. 6d. to £7,283 6s. 3d., a large portion of the increased revenue having been subscribed on the condition that it should be expended in wages to the "unemployed."

Metz. See FRANCE.

Meyerbeer, Giacomo, the great musical composer (really Jakob Meyer Beer), b. at Berlin, 1791. His father, a wealthy Jewish banker, recognised his musical talent, and gave him the best teaching available. Meyerbeer, after writing unsuccessfully German operas, went to Italy, and, adopting the Italian style, competed successfully with Rossini. His "Crocato" produced quite a *furor* at Venice in 1824, and Meyerbeer was crowned on the stage. His success made him apprehensive of failure, and it was not until 1831 he produced his very successful "Robert le Diable." This was followed by "Les Huguenots" (1836). His final work, "L'Africaine," was being rehearsed when he died (1864). Among his chief works we may here mention "Le Prophète" and "Dinorah."

Michael, Colonel, C.S.I. See FORESTRY.

Michaud, Abbe See OLD CATHOLICS.

Michel, Louise. A well known figure and actor in recent political agitation in France. In 1871 she was an active Communist, and was even suspected of being a *pétroleuse*. Be that as it may, she, along with many others conspicuous in the Commune rising, was banished to a French penal settlement in the Pacific, where she remained until the proclamation of an amnesty some years ago. Her return to Paris was made the occasion of a great popular demonstration. She afterwards, as opportunities offered, addressed meetings of the Revolutionary brotherhood in terms which showed that neither her opinions nor her fiery spirit had been changed by banishment. A year or two after her return she took part in some bread riots in Paris, and was tried and convicted for inciting the mob to break into bakers' shops. She was sent to prison, whence she was released in January 1886 on the proclamation of an amnesty in commemoration of M. Grévy's re-election as president. Mlle. Michel is well educated, well connected, a good musician, and for some time followed the occupation of a schoolmistress.

Microphone. The name microphone was given by Hughes, in 1878, to a special form of telephone transmitter. In 1876, shortly after the telephone was discovered by Graham Bell, Edison perfected a carbon transmitter, which consisted of a small disc of carbon connected with a vibrating membrane by a small platinum plate. The variation of pressure produced by the variations of the membrane on the carbon disc alters its electrical conductivity, and so affects the current flowing through it, thereby causing a telephone, which acts as a receiver, to reproduce the sounds taken up by the membrane. Edison's carbon transmitter does not amplify sounds. In Hughes' apparatus mechanical vibrations of feeble intensity are converted into currents, which produce sonorous vibrations of greater loudness than the original noise. It consists of a gas-carbon pencil, pointed at each end, resting on two smaller pieces of carbon, supported on a sounding board placed in a vertical position. These two smaller pieces are connected with the line wires of a circuit containing a battery and telephone. The slightest touch or movement causes a jarring sound to be heard in the telephone. Slight vibrations are much amplified, but very loud sounds are reproduced with diminished intensity. Each movement produces a displacement in the points of contact, and so gives variations in intensity to the current. The walk of a fly over the base of the instrument can be distinctly heard by a person at a distance of more than a mile. Microphones have been employed in physiology and medicine for determining the condition of the beating of the heart, and the movements in the lungs, arteries, and muscles. The most important of these instruments are Ducrest's stethoscopic microphone; Boudet's, which can be used as a myophone, or as a substitute for a sphygmograph; and Chardin and Prayer's micro-telephone for sounding wounds.

Middleton, Digby Wentworth Bayard Willoughby, 9th Baron (creat. 1711); b. 1844; succeeded his father 1877. This family is descended from Sir Thomas Willoughby, Knt., Chief Justice of the Common Pleas temp. Henry VIII.

Midleton, William Brodrick, 8th Visct. (creat. 1717); Baron Brodrick (1796), in right of which last title he holds his seat in the House of Lords, was b. 1830, and succeeded his father 1870. The 1st peer, having filled the office of Speaker of the Irish House of Commons, was subsequently appointed Lord High Chancellor.

Midlothian Campaigns. Mr. Gladstone having announced his intention not to contest Greenwich at the general election of 1880, he received, early in 1879, an invitation from the Liberals of Midlothian to become a candidate for the representation of that county. This invitation the right honourable gentleman accepted, and on November 24th left Liverpool for Scotland. On the way he was received enthusiastically at St. Helens, Wigan and Preston, and at Carlisle addressed a large meeting in the County Hotel. He also spoke at Hawick a few minutes while the train stopped; and next day delivered the first of a series of exhaustive political addresses in the Edinburgh Music Hall. On the following day he spoke at Dalkeith, and on the next at West Calder. Subsequently he spoke in the Corn Exchange and the Waverley Hall, Edinburgh, which practically ended his **First Midlothian Campaign**. But, leaving Edinburgh, he made speeches at Dunfermline, Perth, and Aberfeldy railway stations; and on his return from the north delivered his rectorial address to the students of Glasgow University, and next day a political speech at Motherwell, returning to England after a fortnight of almost incessant speaking. His addresses covered the whole ground of political controversy: the Eastern Question, the Afghan and Transvaal difficulties, the fiscal question, the general finances of the country, and the Irish problem. They created an immense impression on the country, and formed a perfect mine of wealth to Liberal candidates in the following spring. The dissolution of parliament in the beginning of 1880 once more brought Mr. Gladstone into the field. On the 16th of March he set out for his **Second Midlothian Campaign**, destined to be far more memorable than the first. At King's Cross station, before entering the train he sounded the note of battle by declaring that he meant "not only to secure the seat for Midlothian, but to sweep out of their seats a great many other men who represented constituencies in parliament, and consign them to that retirement for which they were more fitted." At Grantham, York, Newcastle, and Berwick, where the train stopped, he made brief speeches, pitched upon the same confident key; and it was remarked afterwards that wherever he addressed the people on this famous journey, the Liberals gained seats. On the following day he delivered an address in the Edinburgh Music Hall, in which he repudiated the intention charged against the Liberals of reversing the foreign policy of the Conservatives, describing the accusation as a "baseless fiction," which was "never embodied in words by his tongue, or by his faculty of speech." He also repudiated the charge that the Liberals would carry out a policy founded upon the doctrines of the **Manchester School**. The error of the school he described as a "noble" one; but if a government tried to conduct its affairs on a pure peace policy, "the dream of a paradise on earth would soon be dispelled by the shock of experience." In the same speech occurred the memorable indictment of Austria as the "unflinching

foe of freedom in every country of Europe." "There is not an instance," he declared, "there is not a spot upon the whole map, where you can lay your finger and say, 'There Austria did good.'" This impassioned deliverance was much criticised by the press, especially the ministerial press, who denounced it as tending to embitter our relations with Austria. Day after day Mr. Gladstone condemned, in perfidious language, the policy of the Conservatives, and expounded and advocated that of the Opposition. Besides attacking in detail the conduct of the Government, he dealt with questions of finance, land reform, Home Rule, and indeed every topic interesting, or likely to interest, the country. In all, he delivered fifteen great speeches. It was computed that in this electoral campaign Lord Hartington delivered no fewer than twenty-four speeches, Colonel Stanley nine, Sir William Harcourt six, and Mr. Bright, Sir Stafford Northcote, and Mr. W. H. Smith as many. Such a flood of oratory had never before been let loose on the country. Mr. Gladstone's efforts, however, really gave the tone to the whole Liberal campaign. The last day of March was the first day of the polling, and the result was a gain of twenty-four seats to the Liberals and a loss of nine. The lead of the Liberals was increased from day to day, until the Government majority disappeared, and a Liberal majority of nearly fifty over all parties was returned to the House of Commons. Mr. Gladstone was returned for Midlothian by a majority of 229. The **Beaconsfield ministry** resigned; and the Queen first sent for Lord Hartington (*q.v.*), as leader of the Liberal party, and subsequently gave audience to Lord Granville and Lord Hartington together. Neither of these statesmen was disposed to form a ministry; and ultimately Her Majesty sent for **Mr. Gladstone** (*q.v.*), who accepted office as Prime Minister and Chancellor of the Exchequer, and at once proceeded to form a Government. Soon after, Mr. Gladstone, in a celebrated letter to Count Karolyi, the Austrian ambassador, explained and apologised for his attack upon Austria during his Midlothian campaign. He repudiated the idea that he had any hostile disposition towards Austria, though he said that he had "grave apprehensions lest Austria should play a part in the Balkan peninsula hostile to the emancipated populations." He admitted that these apprehensions had been founded upon secondary evidence, and expressed his "serious concern" that he should have been led to refer to transactions of an earlier period, or to use terms of censure which he now "wholly banished from his mind." The Emperor of Austria's comment upon this was that the letter was that of an English gentleman. Once more, in **November 1885**, Mr. Gladstone went down to contest Midlothian—the **Third Campaign**—but he neither spoke so often nor so vigorously as before. For many months he had suffered from a bad throat, and it was only after the most careful nursing that he was able to speak at all. Still, at Edinburgh, Dalkeith, and West Calder, he delivered addresses which evoked the utmost enthusiasm; and the result of the contest was that he was elected by the enormous majority of 4,631 over Mr. Dalrymple. In the previous contest we have seen that he was returned by a majority of only 229 over Lord Dalkeith.

Midrash. See TALMUD.

Milan Conference. See ARBITRATION, INTERNATIONAL.

Milan Obrenovitch I., King of Servia, b. 1854, at Jassy, in Moldavia. He studied at Paris, at the Lycée Louis-le-Grand. The assassination of his cousin, Prince Michael, caused his recall to Servia, where he was proclaimed prince at the age of fourteen. A Council of Regency administered the government till the Prince came of age (1872). He displayed energy and activity in his attempt to free the Balkan Peninsula from the misgovernment of Turkey, and to that effect roused his people to action; and when the troubles in Bosnia and Herzegovina took place he raised an army. With the help of the Russian volunteers, under the leadership of General Tcherniaieff, he openly went to war with Turkey. The results of that war were not favourable to the Servians, and after successive defeats, at Alexinatz the Servian Government had to make peace with Turkey. In the meantime, while the struggle was going on, Prince Milan had been proclaimed king at Deligrad. When the war between Russia and Turkey broke out, King Milan sided with the Russians. At the close of the war the Congress of Berlin (*q.v.*) declared the independence of Servia and fixed its boundaries. At that time he found in M. Ristich (*q.v.*), who was one of the regency in the beginning of his reign, a sound adviser in matters where diplomatic skill and statesmanship of a high order were requisite; and that statesman has since occupied the same position near his sovereign. In 1875 His Majesty married the Princess of Stourdza, by whom he has one son, the Prince Alexander. King Milan's name, owing to the stormy period of the Russo-Turkish war, in which he took a prominent part, attracted popular notice, which was still more increased by the political crisis caused by the Roumelian *coup d'état* at Philippopolis, Sept. 19th, 1885. (For the political events arising from this, see BULGARIA and SERVIA.)

Milbank, Sir Frederick Acclom, M.P., was b. 1820. Educated at Harrow. Formerly lieutenant 79th Highlanders. He is Deputy Lieutenant and J.P. for the North Riding and Durham; High Sheriff of Durham (1851). Returned in the Liberal interest as member for North Yorkshire (1865-85); re-elected Richmond Division 1885.

Mildmay, Mr. Francis Bingham, M.P., was b. 1861. Educated at Eton and Trin. Coll., Cambridge, where he graduated (1883). Returned in the Liberal interest as member for South-West Devon (1885).

Military Ballooning. See BALLOONING.

Military and Naval Men Deceased, 1885. See OBITUARY, APPENDIX.

Militia. See ARMY.

Milk Supply. See DAIRY FARMING.

Millaïs, Sir J. Everett, Bart., was b. at Southampton 1829. At the age of eleven he became a student at the Royal Academy, gaining the principal prizes for drawing. His first picture "Pizarro seizing the Inca of Peru," was exhibited at the Academy (1846). In conjunction with Dante Rossetti, and Holman Hunt he set up a school of painting from nature, which obtained the title of "pre-Raphaelite" (*q.v.*), and published a periodical entitled "The Germ, or Art and Poetry," in support of this school (1850). Their views were afterwards supported by Mr. Ruskin (*q.v.*) in the *Times*, as well

as in a pamphlet on pre-Raphaelitism, and in "Lectures on Architecture and Painting." He was elected an A.R.A. (1853) and became R.A. (1863). He has exhibited a large number of pictures up to the present time (1886). Sir J. E. Millaïs was decorated with the "Legion of Honour" (1878), and a baronetcy was conferred upon him (1885). His paintings were recently exhibited at the Grosvenor Gallery (Jan. 1886).

Mill, Mr. John Stuart. See WOMEN'S RIGHTS.

Millionaires, List of, who have died 1864-85. The fortunes represent personalty only, which has paid Probate Duty, and is given at nearest hundred thousand:—

1864	Gurney, Hudson	£1,100,000
1865	Thornton, Richard	2,800,000
1867	Crawshay, W.	2,000,000
1868	Eyres, Samuel	1,200,000
	Guinness, Sir B. L.	1,100,000
1869	Forman, W. H.	1,000,000
	Scott, Samuel	1,400,000
1870	Brassey, Thos. (<i>est.</i>)	2,000,000
	Fielden, Thomas	1,300,000
1871	Loder, Giles	3,000,000
	De Rothschild, Bar. N.	1,800,000
1873	Baring, Thomas	1,500,000
	Baxter, Sir David	1,100,000
	Wolverton, Baron	1,100,000
1874	Langworthy, E. R.	1,200,000
1875	Love, Joseph	1,000,000
1876	Baird, James	1,200,000
1877	Heywood, J. P.	1,900,000
1878	Dysart, Earl of	1,700,000
	Fenn, John	1,000,000
	Thornton, R.	1,000,000
1879	Crawshay (of Cyfarthfa)	1,200,000
	Mills, J. R., M.P.	1,200,000
	De Rothschild, Baron L. N.	2,700,000
1880	Mackenzie, E.	1,000,000
	Portland, Duke of	1,500,000
	Williams, J.	1,600,000
	Wrigley, T.	1,300,000
1883	Overstone, Baron	2,100,000
	Walker, Sir J.	1,100,000
1884	Foster, W.	1,200,000
	McCalmont, R.	1,400,000
1885	Dudley, Earl of	1,000,000
	Vanderbilt, W. H.	40,000,000
1886	Fletcher, James	1,394,000
	Graystone, Rev. A. G.	4,000,000

Mills, Sir Charles. See HILLINGDON, BARON.

Mills, Mr. Charles William, M.P., of the Wildernesse, Sevenoaks, and Camelford House, Park Lane, London, the son of Baron Hillingdon, was b. 1855. Educated at Eton. Is a member of the firm of Messrs. Glyn, Mills, Currie & Co. Returned in the Conservative interest as member for West Kent (1885).

Milltown, Edward Nugent Leeson, 6th Earl of (creat. 1763), was b. 1835, and succeeded his brother 1871. Elected a representative peer for Ireland (1881). His grandfather, Hugh Leeson, or Lesome, of Culworth, Northamptonshire, settled in Ireland (1680), having gone over to that country in the army of Charles I.

Milne, Professor. See EARTHQUAKES.

Milnes-Gaskell, Mr. Charles. See GASKELL.

Milvain, Mr. Thomas, M.P., educated at the Durham grammar school, was called to the bar (1869). Elected as member for Durham City in the Conservative interest (1885).

Mine Explosions, Royal Commission on
See **MINING**.

Mineralogy is the study of minerals, as distinguished from **Petrology** or the study of rocks. A mineral is a natural substance of homogeneous texture and inorganic origin. If not homogeneous, it is a rock rather than a mineral. While substances of organic origin, like pearl and coral, are excluded from all mineral systems, others, like amber, are commonly classed with minerals, because, though originally organic, they have undergone considerable alteration. Most minerals assume, under favourable conditions, definite geometrical forms called **crystals**, and that branch of mineralogy which deals with these forms is known as **crystallography**. When a mineral is not definitely crystallised, but exhibits merely a tendency to crystallise, its texture is said to be **crystalline**; while if no indication of regular form is detected, the mineral is **amorphous**. Such minerals as have solidified from a gelatinous state are **colloidal**—e.g., opal. Minerals differ from each other in various physical properties, such as specific gravity (indicated in works on mineralogy by **S.G.**) and degree of hardness (denoted by **H.**) **Moh's scale** of hardness, which is generally used by mineralogists, is as follows, the softest mineral having the lowest number: (1) talc, (2) gypsum or rock salt, (3) calcite, (4) fluor-spar, (5) apatite, (6) orthoclase, (7) quartz, (8) topaz, (9) corundum, (10) diamond. Many minerals cleave parallel to certain crystalline forms; and the facility and direction of **cleavage** are important diagnostic characters. The colour, lustre, and other optical properties also form useful marks of distinction. Minerals are tested before the blowpipe (denoted by **B.B.**), and especially the degree of fusibility noted. The blowpipe characters offer an insight into the qualitative composition of the mineral. All modern systems of mineralogical classification are based fundamentally on chemical composition and crystalline form. In the national collection of the British Museum (Cromwell Road, South Kensington) a modified chemical classification is used, the principal groups being those of the native elements, arsenides, and sulphides, chlorides, oxides and oxy-salts. In the **Museum of Practical Geology** (Jermyn Street) a practical method, suitable for students of mining, is followed. A primary division is roughly made into the metallic and non-metallic groups—the latter comprising the spars, earthy minerals and gem-stones, many of which, though called “non-metallic,” contain the rarer metals. The metallic minerals, or ores, are classified according to the metal which they yield; thus the ores of iron form one group, and those of lead another. It should be added that mineralogy also includes the study of **meteorites**, or those masses of stony or metallic matter which from time to time have fallen to the earth from extra-terrestrial space. The **British Mineralogical Society** was founded in London on April and, 1799, but had only a short existence. Another society, called **The Mineralogical Society of Great Britain and Ireland**, was established on February 3rd, 1876. Its meetings are held in London and Scotland, and its proceedings are

published in the *Mineralogical Magazine*. The president (1885) is L. Fletcher, Esq., British Museum.

Mineral Oil Trade, Scotch. See **WASTE MATERIALS, UTILISATION OF**.

Mineral Wool. This is a product made from blast furnace slag, and is adaptable to many purposes, especially in building and among engineers, as a non-conductor of heat. It was first made practically available by a German inventor some ten years ago, but several improvements have subsequently been made in its manufacture which have improved the quality and lessened the cost. The wool is usually made by blowing jets of steam or air against a small stream of molten slag, converting the latter into fine vitrified fibres. The system adapted by a new **improved American invention** is to allow the stream of molten slag to fall into a space in front of a central steam-jet-pipe, with flattened orifice, tending to throw the stream of slag in fan-like shape; side jets are arranged to meet the spreading stream of slag and force it inward and upward, where it is again met by other jets, giving it a swirling or twisting motion, but all the time under the action of the steam jets, until the stream of molten slag is discharged in conical shape, and enters the end of the receiving chamber. The product of the entire blow thus becomes light and soft, uniform in quality, and free from granules or shot. Mineral wool is cheaply made, and is becoming more extensively used.

Mings. See **CHINA**.

Mining. In England this word is understood to mean the excavation or winning of geological deposits by subterranean labour. In these islands the leading products of the bowels of the earth are iron and coal; for in 1881, which is recent enough for the purpose of illustration, the proportion of coal and iron to the total of the mineral out-turn was 94 per cent., and it may be remarked that during that year only 1½ cwt. of gold ore and under 6 tons of silver ore were produced in the United Kingdom. The chief home of **tin**, **copper** and **lead** is Cornwall. After a pit shaft has been sunk and the subterranean stopes or steps made to win the ore, the tin is crushed by the stone-breaker and then stamped fine, the residue being carefully washed. With copper, crushing by the means of rolls is adopted, but sometimes stamping, to be followed by hand picking. **Lead** and **zinc** ores are crushed by the rolls, and classified by revolving screens. The buddle which is used for washing is worked on the principle of the ore grains sinking to the bottom, while the rubbish runs off with the escaping stream. The most famous of Cornish mines is the Dolcoath, which contains both copper and tin deposits, and copper and tin mixed, returning rich proceeds to the proprietors. **Iron ore** is found chiefly in two classes of deposits—the hæmatite of Furness, in the north-west, where the virgin iron is imbedded in red clay, occasionally affording perfect kidneys of metal; and the rock ironstone of Cleveland, with its highly phosphoretic surroundings, being the two leading types. The hæmatites are found in “pockets,” so that a shaft may be sunk in the immediate neighbourhood without striking the ore at all. On the other hand, the pocket has been discovered so near the surface

that it has actually been quarried in the open air. Adjacent to the Cleveland iron, beds of basic limestone rest, and these are now used for the elimination of the phosphorus for purposes of steel making (see IRON AND STEEL). In South Wales at one time Black Band ironstone was worked, but of late years this industry has shrunk very much in proportions, owing, to a very great extent, to the demand for steel which the deposits in the Furness district are so admirably designed to meet, and also to the cheap imports of brown *hematite* from Spain. There are said to be some twenty principal coal districts in the United Kingdom, which have been divided as to their characteristics into three descriptions: (1) those forming complete basins, such as the South Wales region; (2) those having only one arm of the basin visible, as in the north of England; and (3) those of irregular formation, such as are found in South Staffordshire or the Black Country. It is estimated that in the United Kingdom half the coal production of the world is won; and last year's output (the returns will not be issued till the spring) may be roughly estimated at between 130 and 140 million tons (see COAL). Of all the English fields, perhaps the Northumbrian has the oldest reputation, with its port of Newcastle; and here the mines have been carried far under the sea. But South Wales has since come to the front in a remarkable degree, and Cardiff is now the leading coal port in the world, its chief commodity being the smokeless steam coal which is considered invaluable for steamships. It was a London and South Wales firm who bought the Great Eastern steamship in Oct. 1885 for £26,200, and it was subsequently announced that the great vessel was to load with 10,000 tons of coal at Swansea, and then proceed as a coal hulk to the Mediterranean. A feature of the trade is the supply of the London markets, for which South Yorkshire, which sends by rail, but will probably now forward by the new line of railway through Hull, and Northumberland through Newcastle by sea, have long been competitors. As the sea rates, although the distance is longer, are about half the railway carriage, the sea-borne coal, or as it used to be called "sea coal," has carried the palm, even though there is a duty for municipal purposes on all coal delivered in the river Thames of 1s. 1d. per ton, 9d. going to the Metropolitan Board of Works and 4d. to the Common Council of the City of London. Mining is regulated by a series of Acts of Parliament: thus women, and children of tender age are not allowed to go below ground, as they used to be, and are now in foreign countries. But women and girls are employed about the surface works to this day—in portions of South Wales, for instance, where no other occupation is open to them—and their singular garb is calculated to excite the interest of the passing stranger. Combinations of a trade character exist to a greater or less degree among all classes of miners—who are as a rule a peculiar class of men, for the calling has for centuries been followed from father to son. Up to a dozen years ago, when the inflation of the iron trade caused coal to run up to famine prices, high wages were paid to the pitmen, and the inevitable decline was met by a series of disastrous strikes. One lasting good of these otherwise unfortunate trade disputes, however, was the pretty general adoption of the system of arbitration and conciliation, so warmly advo-

cated and frequently illustrated by Mr. Kettle (afterwards Sir Rupert), judge of the Dudley District County Courts. To this was coupled a sliding scale system, with sworn accountants; and for years past the Northumbrian and Durham coal fields, on the one hand, and the South Wales field on the other, have been free from strikes, the bare announcement of the average selling prices over a given period being sufficient to fix the rate of wages for the ensuing term. Of course this unanimity could not be obtained from the men without some controlling power of their own selection; and at the present moment they are represented by the powerful organisation known as the National Union of Miners. Nor is the operation of this Union limited by any means to wages questions. The coal miners, recognising the danger of their calling, have paid much attention to politics; and the recent general election on the new franchise sent five or six *bona-fide* miners to parliament, while at their last annual conference at Birmingham (Jan. 1886) the roll gave a representation of over 324,000 men. In many circles it is felt that the combined miners represent a coming force, for they have the seeds of all the industrial operations in their hands. In the Queen's Speech (*q.v.*), at the opening of the present parliament, a bill was promised "for the more effectual prevention of accidents in mines" which may refer to the Royal Commission on Mine Explosions, which has been long at work, but has not yet issued a report. Probably one result of this investigation will be the prevention of blasting in fiery mines, and the provision of a true safety lamp, the Davy having long since passed out of date. Electricity (*q.v.*) has been applied to mining with some success, and so have various machines for mechanical coal winning.

Minor Planet, No. 252. See ASTRONOMY.

Minor Scale. See SCALE.

Minster, Baron. See CONYNGHAM.

Minto, William Hugh Elliot-Murray-Kynynmound, 3rd Earl of (creat. 1813), was b. 1814, and succeeded his father 1859. The 1st baronet was a Scottish advocate, descended from a common ancestor with the celebrated General Elliot, afterwards Baron Heathfield. The first peer was Governor-General of India. "Minute Philosopher, A." See NOMS DE PLUME.

Miocene. See GEOLOGY.

Mishna. See TALMUD.

Mitcherlich and Wild. See POLARISCOPE.

Mixed Commission. See INTERNATIONAL ARBITRATION.

Mixture. See ATOMS AND MOLECULES.

Moab. See BIBLICAL ARCHEOLOGY.

Moabite Stone. See BIBLICAL ARCHEOLOGY.

Moberly, The Right Rev. George, late Bishop of Salisbury, was b. 1803. Educated at Winchester College and Balliol College, Oxford, where he was successively Scholar, Fellow, and Tutor. He took his Bachelor's degree (1825), obtaining a first class in the school of *Literæ Humaniores*. In 1835 he was appointed Head Master of Winchester, over which he presided for more than thirty years, when he resigned, and was appointed rector of Brightstone, Isle of Wight, and Canon of Chester. In 1866 he was consecrated to the see of Salisbury. Died July 6th, 1885.

Moderate Party. See ITALY.

Mohr's Scale. See MINERALOGY.

Mokhtar. See MAHDI.

Molecular Weight. See ATOMS AND MOLECULES.

Molecules. See ATOMS AND MOLECULES.

Mollahs. See KIRGHIZ.

Molloy, Mr. Bernard Charles, M.P., was b. 1843. Educated at St. Edmund's Coll., Herts, and the Universities of France and Bonn. Formerly an officer in the French army, and is a Private Chamberlain to the Pope. Called to the bar at the Middle Temple (1872). Returned as a Nationalist for King's County (1880-85); Birr Division (1885).

Mollusca. See ZOOLOGY.

Moltke, Field-Marshal Helmuth Carl Bernhard, Count Von. A great European strategist, b. Oct. 26th, 1800. He left the Danish service (1822) for that of Prussia, and became (1832) one of the staff officers. In 1835 he superintended the Turkish military reforms, and went through the Syrian rebellion (1839). He was in 1856 aide-de-camp to Prince Frederick William of Prussia. He was appointed (1864) chief of the staff in the Danish war. In 1866, in the Austro-Prussian war, his successful tactics as General of infantry won the battle of Sadowa. On the conclusion of the war the decoration of the Black Eagle was conferred upon him, and he was created General-in-chief of the staff. The successful conduct of the Franco-Prussian war (1870-71) was also due, in great measure, to the tactical plans of Count Moltke. He was made Field-Marshal in 1871, Count in 1870.

Monad (*Gr. monos*, single). This word has three significances—a chemical, a biological, and a psychological. (1) In **Chemistry** a monad is an element one atom of which combines with or replaces one atom of hydrogen—the unit element. Thus chlorine is a monad, as one atom of chlorine (Cl) combines with one atom of hydrogen (H) to form a molecule of the compound hydrochloric acid (HCl); and potassium or kalium (K) is a monad, as one atom of it can replace one atom of hydrogen in hydrochloric acid and form potassium chloride (KCl). Dyads, triads, tetrads, pentads, and hexads, are elements one atom of which combines with or replaces 2, 3, 4, 5 or 6 atoms of hydrogen. (2) In **Biology** the word monad was used for any very minute living organism. In this older, wider sense unicellular plants, members of the Protozoa class—Rhizopoda (root-footed), to which amoeba and the foraminifera belong, and even the wheel animalcules or rotifera, were included. Now the term is applied only to certain infusoria. A genus of the flagellate infusoria (*q.v.*) is called Monas. The species are found in salt and fresh water, and in infusions generally. They have no mouth, and have one flagellum only. Many of them are probably stages in the life history of other forms of infusoria, or even of low plants. (3) In **Psychology** the name monad was given by Leibnitz to the primary elements of matter. Out of the aggregation of these grew the compound masses of matter that make up the universe. These monads were created simple, indestructible; of two kinds, the one having perception only and not consciousness, the other perception *plus* apperception or consciousness.

Monarchists. See FRENCH POLITICAL PARTIES.

Monas. See MONAD.

Monck, Charles Stanley Monck, P.C., 4th

Visct. (creat. 1800); Baron Monck (1866), by which title he holds his seat in the House of Lords; was b. 1810, and succeeded his father 1849. Was a Lord of the Treasury (March 1855 to March 1858). Appointed Governor-General of Canada (Oct. 1861), and formally reappointed, under a fresh Act of Parliament, Governor of the United Provinces of Canada, Nova Scotia, and New Brunswick (June 1867); resigned Nov. 1868, when he received the thanks of the Queen for public services there.

Moncrieff, James Moncrieff, 1st Baron (creat. 1873), a Lord of Session in Scotland by the title of Lord Moncrieff, was b. 1811. Was Solicitor-General for Scotland (Feb. 1850 to April 1851), when he became Lord Advocate, and so remained until March 1858. Held the same office for the fourth time (Dec. 1868 to Nov. 1869), when he was appointed Lord Justice Clerk and President of the second division of the Scotch Court of Session.

Money Orders. The system of money orders was originally founded in 1792. It was then, however, more in the nature of a private speculation on the part of three post-office officials, and no order could be issued for more than five guineas, the charge for which amount was 4s. 6d., or nearly 5 per cent. In 1838 the system was incorporated with the Post Office, and since that date it has rapidly developed into a successful undertaking. The mainspring of the system is the almost perfect immunity from risk which, by means of the letter of advice, is secured in the remittance of money by this method. The rates now charged for money orders are: 2d. for sums under 10s. 3d., for sums of 10s. and under £2, and 1d. for every additional pound above £2 up to £10, the largest amount for which a single order is issued. The person who purchases a money order must give his name and address, the name of the person to whom he wishes the money to be paid, and the office at which it is to be paid. Money orders become legally void at the expiration of twelve months from the month of issue, but the Post Office will entertain an application for the payment of a lapsed order, subject to a certain deduction if a good reason for the delay in presenting it can be given. When a money order is once paid the Post Office is not liable to any further claim. **Payment** of an order cannot be demanded on the same day as that on which it was issued. Duplicates of lost money orders are granted on application, if the particulars of the original order can be furnished to the Controller of the Money Order Office. **Transfer of payment** of a money order from one office to another in the United Kingdom, or repayment of the amount of an order, can be obtained by applying and sending the order to the postmaster at whose office it is payable, who will send a new one in exchange, payable at the place desired, less the second commission charged for the re-issue. No letter carrier, rural messenger, or other servant of the Post Office, is bound to procure a money order for any reason, or to obtain payment for one; but such services are not prohibited. **Foreign or Colonial** money orders are also issued, payable in India, the United States, Australia, Canada, the Cape of Good Hope, in almost all our Colonies, and in the following foreign countries—viz., Austria, Hungary, Belgium, Denmark (including Danish West Indies), Dutch East Indian Possessions, Egypt, France, Germany, Hawaii (Sandwich

Islands, Holland, Iceland, Italy, Japan, Norway, Portugal, Sweden, Switzerland, and the United States. The rates charged are: for sums not exceeding £2, 6d.; £5, 1s., £7, 1s. 6d., and £10, 2s. The total number of money orders of all descriptions issued in the year ended March 31st, 1885 (last return), was 12,214,592, and the amount £24,223,295. The number of money order offices now open throughout the United Kingdom is over 7,756. The Chief Money Order Office is located in Aldersgate Street, London, E.C., a few yards from the General Post Office, and the force there employed numbers 71 persons.

Mongols. See CHINA.

Monk Bretton, John George Dodson, P.C., 1st Baron (creat. 1884), was b. 1825. Was for eight years Deputy Speaker of the House of Commons, Chairman of Ways and Means, and Chairman of Referees; Financial Secretary to the Treasury (1873-4); President of the Local Government Board (1880-2), and Chancellor of the Duchy of Lancaster (1882 till his elevation to the peerage).

Monkswell, Robert Pollett Collier, P.C., 1st Baron (creat. 1885), was b. 1817. Was Solicitor-General (1863-66), Attorney General (1868-71); M.P. for Plymouth (1852-71); appointed a Justice of Common Pleas (Nov. 1871), and a few days subsequently a member of Judicial Committee of Privy Council.

Monophysites. See COPTIC CHURCH.

Monson, William John Monson, P.C., 7th Baron (creat. 1728), was b. 1829, and succeeded his father 1862. Was one of the Speakers in the House of Lords (1882). The 1st peer represented Lincoln in several parliaments. His 2nd son was created Baron Sondes. Baron Monson holds at the present time (1886) the office of Captain of Yeomen of the Guard.

Monsoons. See METEOROLOGY.

Montagu, Mr. Samuel, M.P., was b. 1832. Educated at the High School of the Mechanics' Institute, Liverpool. Head of the firm of Samuel Montagu and Co., bankers. Member of the Board of Deputies of the Council of the United Synagogue. Returned in the Liberal interest as member for Whitechapel Division, Tower Hamlets (1885).

Montagu, Henry John Montagu-Douglas Scott, P.C., 1st Baron (creat. 1885); was b. 1832. Sat in the House of Commons in the Conservative interest as M.P. for Selkirkshire (1861-68); South Hampshire (1868-84).

Mont Genis Tunnel. See ENGINEERING, and ITALY.

Monteagle of Westport, Baron. See SLIGO.

Monteagle, Thomas Spring Rice, 2nd Baron (creat. 1839), was b. 1849, and succeeded his grandfather 1866. Is descended from Sir Stephen Rice, Chief Baron of the Irish Exchequer temp. James II. The 1st peer was successively Under-Secretary of State for the Home Department, Secretary to the Treasury, Chancellor of the Exchequer, Comptroller General of the Exchequer, and sat in Parliament for nearly twenty years as representative for Limerick and the borough of Cambridge.

Montefiore, Sir Moses, b. October 24th, 1784. He received his education in London, and entered the Stock Exchange, becoming one of the twelve licensed Jewish Brokers. At the time of the threatened invasion of England by Napoleon I., Montefiore served as captain in the Surrey Militia. In 1812 he married Judith, daughter of Mr. Levy Barent

Cohen (died September 25th, 1865), and to her memory Sir Moses founded and endowed the Theological College at Ramsgate. He retired from business at the age of forty, but became a prominent supporter of many public companies. Throughout his life he was renowned for his endeavours on behalf of the freedom and toleration of the Jews, visiting Jerusalem (1827) and on several subsequent occasions, his last and seventh visit being in 1875. By his efforts the condition of the Jews was greatly improved, schools were erected, and more toleration shown to them by the Turks. In 1840 Sir Moses, in the interests of the persecuted Jews in Damascus, obtained from the Sultan of Turkey as well as the Sultan of Morocco, whom he visited 1864, important concessions for the relief and protection of the Jews. To the same end he also visited Roumania, Rome, and Russia. His philanthropy was not exclusively confined to Jews, but was extended to all creeds. In 1864 he originated a subscription for the relief of Christians in Syria, and again in 1871 raised and sent large sums to Paris. He was Sheriff of the City of London in 1837, and on the occasion of Her Majesty's visit was knighted. In 1840 he was created a baronet with permission to add supporters to his coat of arms—a dignity reserved to those of higher rank. He reached his one hundredth year on October 24th, 1884, on which occasion he received presents, telegrams, and messages from all parts of the world. He died July 28th, 1885. (See also FIRE AND LIFE INSURANCE.)

Montenegro. A principality under the patriarchal rule of Prince Nicholas I., which is practically absolute, though nominally shared with a council of eight, half elected by the inhabitants capable of bearing arms, and half nominated by the prince. The area is about 3,550 square miles; pop. about 250,000. No official returns of the revenue exist, but it is supposed to be about £60,000. A debt of £100,000 was raised on security of the same monopoly in 1881. An annual pension of £4,800 has been paid by Russia in return for constant support, and an annual sum of £3,000 from Austria as a subvention for carriage roads. There is no standing army except a bodyguard of 100 men; but all the male inhabitants capable of bearing arms (about 22,000) are called out in war time. The nation joined the Servians in their war against Turkey in 1876, repelling with heavy loss all attacks made by the greatly superior forces of the Turks; at the close of the war they were declared independent, and accessions of territory were granted. The cession was resisted by the Albanian neighbouring tribes, but it was not till a naval demonstration against the Albanian coast was made by the Powers that the Porte finally succumbed, expelled the *soi-disant* Albanian rebels, and in November 1880 delivered up the territory in question. Disputes as to details of the frontier line (which, indeed, up to the present have not been settled) and conflicts with the Albanians, took place in 1883, but otherwise the course of events has been peaceful.

Montesquieu, M. See DEMOCRACY.

Montgolfier, The Brothers. See BALLOON-ING.

Montrose, Douglas Beresford Malise Ronald Graham, 5th Duke of (creat. 1707); Earl and Baron Graham (1722), by which title he holds his seat in the House of

Lords, was b. 1852, and succeeded his father 1875. This is one of the oldest of the Scottish families. The 1st peer was one of the Lords of the Regency during the minority of James II. of Scotland; the 5th Earl became the 1st Marq., and was the well-known military commander *temp.* Charles I.

Moody and Sankey, Messrs. the American Evangelists. Mr. D. L. Moody, the preacher, and Mr. Ira D. Sankey, the singer, have visited Great Britain twice (1873-75, and 1881-83). They were invited to England in 1873 by the late Rev. William Pennyfather, of Mildmay Park, and Mr. Cuthbert Bainbridge, of Newcastle. On their arrival, however, they found both these gentlemen had died. An invitation was also sent to them from the Young Men's Christian Association in York; and there, in a small room, in June 1873, these meetings began. Their labours were so successful that, in response to numerous invitations, they visited many of the principal towns of the north, including Edinburgh and Glasgow. In 1874 they engaged the Agricultural Hall, Islington, which proved too small, and they continued their labours in Her Majesty's theatre, and in a building specially constructed for them in the East End, and afterwards at Camberwell. Their meetings were brought to a close at Mildmay in 1875. In 1881 they paid a second visit, and went over much the same ground in the north. They also carried on their work in London in large halls specially erected for their use at Islington, Stepney, Wandsworth, etc.; concluding their mission June 23rd, 1883. A special feature of the mission was the singing of hymns which are now world-wide, the words being translated into many of the languages of the Continent, and also in the East as far as China, where they are sung. No attempt was ever made to number "converts" at their meetings, but many are known in all grades of society, and not a few have gone to the mission fields, especially China.

Moore, Baron. See DROGHEDA.

Moray, George Stuart, 14th Earl of (creat. 1561); Baron Stuart (1796), by which last title he holds his seat in the House of Lords, was b. 1814, and succeeded his brother 1872. The 1st Earl of Moray was the celebrated Regent of Scotland, natural son of James V.

More, Mr. Robert Jasper, M.P., was b. 1836. Educated at Shrewsbury and Balliol Coll., Oxford. Is J.P. and Deputy Lieutenant for Salop; High Sheriff for that county (1881). J.P. for Montgomery and the borough of Wenlock. Returned in the Liberal interest as member for South Shropshire (1885).

Moreton, Baron. See DUCIE, EARL OF.

Morgan, The Hon. Frederick Courtenay, M.P., of Ruperra Castle, Newport, Monmouthshire, second son of the first Baron Tredegar, was b. 1834. Educated at Winchester. Formerly capt. Rifle Brigade; is now lieut.-col. commanding 1st Monmouth Administrative Battn. Rifle Volunteers. J.P. for the counties of Monmouth and Glamorgan, and Deputy Lieutenant for Monmouth. Returned in the Conservative interest as member for Monmouthshire (1874-85); re-elected (1885).

Morgan, Rt. Hon. George Osborne, P.C., M.P., Q.C., was b. 1826, and educated at Shrewsbury School, and Balliol College, Oxford, where he graduated, obtaining the Newdigate and Chancellor's prizes, and other University honours. Fellow of University

College. Called to the bar at Lincoln's Inn (1853), of which he is a Bench. Appointed Q.C. (1869). He is a J.P. for Denbighshire. Entered parliament in the Liberal interest as member for Denbighshire (1868); elected for East Denbighshire (1885). Has held office as Judge-Advocate-General, and P.C. (1880). Was Chairman of the Select Committee of the House of Commons on Land Titles and Transfer (1879), Under-Secretary Colonial Office (1880).

Morgan, Mr. Octavius Vaughan, M.P., was b. 1837. He is J.P. for Surrey, member of the Municipal Reform League, and a Fellow of the Statistical Society. Returned in the Liberal interest as member for Battersea (1885); re-elected 1886.

Morganatic Marriage. Morganatic or "left-handed" marriages are by the common law of Germany permitted to the royal houses and the higher grades of nobility; the Prussian law allowing a like indulgence to the lower nobility. The term "morganatic" is said to be derived from the fact that the wife's rights were limited to the *Morgengabe* (*donum matutinale*), or, according to others, from the old Gothic *morgjan*, i.e. "to shorten, to limit." Such an alliance is a system of concubinage, with the exception that children born of the marriage are legitimate, although neither they nor the wife have any legal right to the rank and fortune of the husband. Men and women of high rank may contract morganatic marriages with persons of inferior position. Inequality of social condition, however, is not necessary to an alliance of this kind. It may be made between persons of equal rank, so as not to prejudice the children of a first marriage by giving rights of inheritance to the offspring of a second.

Morley, Albert Edmund Parker, P.C., 3rd Earl of (creat. 1815), was b. 1843, and succeeded his father 1864. Was a Lord-in-waiting to the Queen (Dec. 1868 to Feb. 1874), and Under-Secretary of State for War (May 1880 to June 1885); First Commissioner of Works (Feb. 1886).

Morley, Mr. Arnold, M.P., B.A. Cantab., was b. 1849. Educated at Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1873). Member of the Senate of the University of Cambridge. Returned in the Liberal interest as member for Nottingham (1880-85); re-elected 1885. Patronage Secretary to the Treasury (1886).

Morley, Mr. John, M.P., P.C., LL.D., M.A. (Oxon), was b. 1838. Educated at Cheltenham and at Lincoln Coll., Oxford. Called to the bar at Lincoln's Inn (1873). Hon. LL.D. of Glasgow Univ. Author of various works of the French Philosophers of the 18th century, of an essay on Compromise, and of a "Life of Cobden," "Edmund Burke," and a "Voltaire." Returned in the Liberal interest as member for Newcastle-on-Tyne (1883-85); re-elected 1885. Chief Secretary for Ireland in the present Gladstone administration (1886). Mr. Morley, who had previously made a brilliant literary reputation, has recently come prominently to the front as a leading politician of the advanced Liberal school, especially with reference to his views on Home Rule (*q.v.*).

Mormon, The Book of. See MORMONISM. **Mormonism.** The Mormons, or Latter Day Saints, are a sect founded by Joseph Smith at Manchester, New York (1830). Smith was b. in 1805 at Sharon, Vermont, U.S.A. At the age of fifteen years he commenced to have his

alleged visions, in one of which, in the month of September 1823, he stated that the angel **Moroni** appeared to him three times, and told him that the Bible of the Western continent—the supplement to the New Testament—was buried in a certain spot near Manchester. Thither, four years later, Smith went—and received from an angel a stone box in which was a volume made of thin gold plates, covered with small writing in the reformed Egyptian tongue. In 1830 the alleged contents were published, under the title of "**The Book of Mormon**." In this book Smith was declared to be God's prophet, and entitled to all obedience. In reality the book, which is described as a "bad romance," was written in 1812 by **Solomon Spalding**. Armed with this "new revelation," Smith soon began to attract followers. With thirty adherents he removed to Kirtland, Ohio, where he founded a bank in accordance with a "revelation," but the country being flooded with worthless notes, Smith and another were one night dragged from their beds and tarred and feathered. Subsequently Smith obtained a charter from the State of Illinois, and founded the city of **Nauvoo**. In April 1841 the foundations of the new temple were laid, and the city continued to grow rapidly in prosperity and size. Some years previously he had prevailed on several women to live with him; and in order to justify his position, in July 1843 he proclaimed that he had had a revelation expressly approving of **polygamy**. The proclamation of this new doctrine excited indignation, and in consequence of some high-handed proceedings on the part of Smith towards a newspaper proprietor disturbances ensued. In June 1844 Smith and his brother **Hyrum** surrendered to await their trial, and were imprisoned in Carthage gaol; but that same night (June 27th) a mob broke into the prison and shot the two men dead. **Brigham Young**, who had some years previously been ordained one of "the twelve," and was sent to preach throughout the eastern states, was elected to the presidency. The following year the legislature of Illinois repealed the charter, and the whole body of the Mormons marched with military discipline across the wilderness to the valley where they immediately proceeded to found **Salt Lake City**. On July 24th, 1847, they were joined by Brigham Young. A great city sprang up as if by magic, and the untiring industry, energy and zeal of the Mormons turned a barren wilderness into a fruitful garden. In March 1849 a convention was held at Salt Lake City, and a state was organised under the name of **Deseret**, meaning "the land of the honey bee." A legislature was elected, and a constitution framed and sent to Washington. Congress refused to recognise it. After a period, of what are now termed "strained diplomatic relations" with the Federal Government, and in consequence of a party of Mormons and Indians attacking a train of 150 non-Mormon emigrants and massacring them, the territory was declared in a state of rebellion, but in the spring of 1858 the Mormons submitted to the Federal authority. At the close of the American civil war a Federal governor was again appointed, and in 1871 polygamy was declared to be a criminal offence. The Mormons, however, continued to practise polygamy, and to increase in wealth and numbers, until the 29th August, 1877, when Brigham Young died, leaving a fortune of

£400,000, seventeen wives, and fifty-six children. He was succeeded by **John Taylor**, an Englishman. Of late years the Mormons have largely occupied public attention in America. Bills have been passed having for their object the abolition of the practice of polygamy, but all without immediate and direct effect. A crisis, however, seems to be near at hand. According to recent accounts, an attack upon the United States Marshal by a Mormon mob led to one of the saints being shot. This resulted in such a state of feeling among the inhabitants of Salt Lake City that the Marshal, when rescued, was removed to Camp Douglas, the fort which lies about four miles from the town. It also appears that more troops have been moved up. The Union Pacific Railway, and the discovery of mines, have put an end to the seclusion in which the Mormon community formerly lived; and a "Gentile" colony, though shut out by the Mormon monopoly of the water from taking up any land, settled largely in Salt Lake City and the mining camps, and have quite changed the whole habits of the country. In President Cleveland's message (December 8th, 1885) he inveighs against polygamy, and recommends the passing of a law to prevent the importation of Mormons. It is evident, therefore, that notwithstanding that the main principles of Mormonism are polygamy and proselytism, a definite interference with the peculiar institutions of the Mormon community in Salt Lake City is only a matter of time and opportunity. On January 9th of the present year (1886), Senator Edmund's bill for the suppression of polygamy passed the United States Senate by 38 votes to 7. Under its provisions, in any prosecution for bigamy, polygamy, or unlawful cohabitation, the wives of the accused are not only made competent witnesses, but are compelled to testify. No marriage in the territory will be valid without a regular certificate; and the records of marriages must at all times be open to the inspection of United States officials. The present law of the territory, that actions for adultery can be begun only on complaint of the husband or wife, is annulled. Illegitimate children are disinherited. The bill further places the affairs of the Mormon Church under the control of trustees to be appointed by the President of the Republic; and among the other provisions to stop polygamy is a clause prohibiting women from voting in the State of Utah. The result of these proceedings will be to drive the Mormons from Utah; and it is stated that they have selected Nevada as the place where they will make a final stand for the maintenance of their institutions. The Mormons are said to be anxious to secure themselves by immigration into Nevada until they can secure a majority at the polls. Should they succeed in securing the administration of the local laws, they will have enlisted for their protection the whole force of States' rights. The New York *Sun* observes that "the next phase of the Mormon question may be the appearance of Mormon representatives in the halls of Congress, duly accredited from a State which, though sharing nothing of the spirit of American nationality, and actually hostile, possesses equal rights and powers with every other State. Such representatives, partaking of the character of ambassadors from a Sovereign State, may demand that its citizens shall not only not be disturbed, but shall be protected in

the right to worship God and to practise their social and religious rites, according to the dictates of their own consciences."

"Morning Advertiser," daily paper (3d.) founded February 8th, 1794, is the recognised organ of the licensed victuallers. It possesses distinctive features of its own; while being Liberal and Independent and Constitutional in politics, it is not exclusively the advocate of any one party. Editor, **Capt. Hamber**.

"Morning Post," daily (1d.). Conservative in its politics, it is also the fashionable chronicle of the party, giving events of interest among the higher circles of society. It also, in addition to news of the day, home and foreign, gives critiques on literature, science, and art. Editor, **Sir Algernon Borthwick**.

Morocco. The westernmost of the Barbary States, occupying the N.W. corner of Africa. It is ruled by a sultan (**Mulai Hassan**), usually styled "emperor" by Europeans. He is absolute, but the tribes beyond the mountains scarcely acknowledge his authority. The empire consists of the kingdoms of Fez and Morocco, and the territories of Suse, Draha, and Taflet, with the oasis of Twat. Area about 260,000 square miles, of which the Tell, or coast-region, occupies 76,000, the steppes 26,000, and the Sahara districts 158,000. Estimated pop. 5,000,000. Inhabitants are Berbers, the descendants of the ancient Numidians; Moors, half-caste descendants of Arab conquerors of eighth century; Arabs, Negroes, and Jews. Religion, Mohammedanism. Products are wheat, barley, maize, olive oil, esparto grass, hemp, many fruits, wool, etc. It is said there are coal, iron, antimony, copper, lead, tin, gold and silver, and other minerals in quantity. Chief manufactures are carpets, slippers, and famous leather. Exports, produce and manufactures, also fowls, eggs, cattle, gums, ostrich feathers. There are three capitals: Fez (pop. 80,000), Morocco (pop. 50,000), Mequinez (pop. 56,000). Chief ports are Mogador and Tangier, on the Atlantic; Tetuan and some smaller places on the Mediterranean. **Taflet** is the point of arrival and departure for the caravans through the Sahara. The sultan is head of religion as well as of the state. The executive is vested in his favourites. He has a body-guard of 5,000 infantry and cavalry. There is another force of some 10,000, and a militia of 80,000. Imperial revenue about £500,000. Exports about £1,700,000; imports about £770,000. Trade passes mainly through **Tangier**, which is under British influence. In 1883 Spain acquired a port south of Mogador. There are constant reports of cruelties, injustice and atrocities committed in Morocco, and there has lately been an outcry among the better classes in the ports for a European protectorate. **Germany** is known to be endeavouring to arrange a treaty with the emperor, and it is rumoured desires to obtain a footing in Morocco. In the interests of civilisation and order it is to be hoped she will succeed. (Consult *De Amicis* "Morocco," *Hooker's* "Tour in Morocco," *Leared's* "Morocco and the Moors," *Watson's* "Visit to Wazan.")

Moroni. See **MORMONISM**.

Morrisonianism, a name used to designate the principles held by members of the Evangelical Union, formed by Dr. Morrison and others, in May 1843, of those who disagreed with the doctrine held by the Presbyterian Churches that Christ only died for the elect.

Evangelical Unionism first originated in 1841, when its founder and three other ministers separated from the United Secession Church. The Evangelical Union Churches, which are mainly confined to Scotland, have a theological hall, where a number of students attend; and a weekly official organ, the *Christian News*. Many of the ministers, all of whom are total abstainers, have settled in England in Congregational churches, which are somewhat similar in church government. In all there are about ninety E. U. churches. The distinctive tenets are that the Divine Father loves all, the Divine Saviour died for all, and the Divine Spirit strives with all.

Morris, William, artist and poet; b. at Walthamstow in 1834, and educated at Marlborough and Oxford. His first volume, "The Defence of Guenevere and other Poems," was published in 1858. An artist and the friend of artists, Mr. Morris turned his attention for some time to the study of architecture; and in 1868, together with his friends **Dante G. Rossetti** (see **ROSSETTI**) and **Burne Jones**, determined to do something to make the everyday surroundings of our households less ugly and less vulgar. For this purpose a business for the manufacture of various articles, but more especially of "art fabrics," wall-papers, and stained glass, was started. Though undertaken rather as an artistic venture than as a business speculation, the concern—now carried on by Morris and **George Wardle**—has been extremely successful, and has effected something like a revolution in the art of designing. Besides his work as draughtsman, Mr. Morris in 1867 published his poem, "The Life and Death of Jason," followed by his best known work, the narrative (four-volume) poem, "The Earthly Paradise" (1868-70), by "Love is Enough" (1873), "The Æneid of Virgil done into English verse" (1876), and "Sigurd the Viking" (1877). In collaboration with Mr. **Eirikr Margnusson** Mr. Morris has made several translations from the Icelandic sagas—"The Story of Grettir the Strong" (1866), "The Story of the Vikings" (1870), and "Three Northern Love Stories" (1875). The series of lectures "Hopes and Fears for Art" was issued in 1881. Always an advanced Radical, Mr. Morris in 1882 joined the ranks of the Socialists, first as member of the "Social Democratic Federation." In 1884 Mr. Morris, together with various other Socialists, seceded from the Federation on certain questions of principle, and with them founded the "Socialist League." Edits in conjunction with Dr. **Aveling** the *Commonweal*. (See **SOCIALISM**.)

Morrone, General. See **SPAIN**.

Morse Sounder Apparatus. See **POSTAL TELEGRAPH DEPARTMENT**.

Mortgage. Various etymologies of this term have been given by various authorities. Used in its widest sense it means little more than a pledge given to secure a debt. But in its most ordinary sense it means a pledge of lands or houses. The nature of such a mortgage has been well stated by Mr. **Joshua Williams**, in his "Principles of the Law of Real Property." "Let us suppose freehold lands to be conveyed by A, a person seised in fee, to B and his heirs, subject to a proviso that on repayment on a given future day by A to B of a sum of money then lent by B to A, with interest until repayment, B or his heirs will reconvey the land to

A and his heirs; and with a further proviso that until default shall be made in payment of the money A and his heirs may hold the land without interruption from B or his heirs. Here we have at once a common mortgage of freehold land." The courts of common law took a stringent view of such a conveyance as above described, and held that if A did not pay what he owed on the day fixed by the agreement, he should lose his land for ever. But the Court of Chancery allowed the mortgagor further time in which to redeem his land, and the right thus created is known as the equity of redemption. This interference of the Court of Chancery dates from the reign of James I., and was carried so far as to annul any agreement between the parties for taking away the mortgagor's equity to redeem. The right of the mortgagor to redeem is, however, limited by the right of the mortgagee after the lapse of a reasonable time to bring an action for foreclosure in the Chancery Division, asking that the mortgagor may be directed to pay the principal and interest of the mortgage debt, together with all costs incurred, or in default of so doing may be foreclosed (*i.e.* deprived of his right to redeem the mortgaged property). Thereupon the Court may make a decree for foreclosure or order a sale of the property. It is usual to insert in mortgage deeds a clause enabling the mortgagee to sell the property when he shall think fit, limited by a proviso that he shall not exercise this power unless default shall have been made in payment of the principal or interest secured. But upon any sale, whether under such a clause or under an order of the Court, the mortgagee is entitled to retain out of the proceeds of sale only so much as will reimburse him for principal, interest and costs. So, likewise, if he enter into possession whilst the equity of redemption survives, he must account for rents and profits received by him, although the mortgagor whilst he remains in possession is under no such obligation. It is also usual to insert in mortgage deeds a covenant by the mortgagor to pay what he owes. This makes him personally liable, as for a common debt, and gives the mortgagee an additional remedy. A stipulation that the interest on a mortgage debt shall be raised in default of punctual payment is void; but a stipulation that such interest shall be lowered on punctual payment is valid. If the mortgagor wishes to pay off the debt at any time later than the day named for repayment in the mortgage, he must give six months' notice of his intention so to do, in order that the mortgagee may have time to find a new investment for the money lent. A mortgage, like any other conveyance, is properly made by deed; but an equitable mortgage can be effected simply by depositing with the lender the title-deeds of the property on which the loan is to be secured. The equity of redemption is regarded as an interest in real property, and descends as such. A mortgagor may mortgage his equity of redemption as often as he can find somebody to advance money upon the security thereof; and the mortgagees will be entitled to payment in the order of priority. But only the first mortgagee has the legal estate in the mortgaged property. He, therefore, if he have taken a subsequent mortgage of the equity of redemption, may tack (as the phrase is) his subsequent mortgage to his first mortgage, and recover all that he has advanced upon either in

priority to any other mortgagee whose mortgage intervenes between his own mortgages. Any of the subsequent mortgagees who has more than one mortgage, if he can get from the first mortgagee a transfer of the legal estate, may tack in the same manner. The mortgagee's interest in mortgaged property descends not like real estate to the heir, but like personal estate to the executors or administrators of the mortgagee. (See Williams' "Principles of Real Property," the chapter entitled "Of a Mortgage Debt.")

Morton, Sholto George Douglas, 21st Earl of (creat. 1458), was b. 1344; succeeded to the earldom 1884. Elected a representative peer for Scotland (March 1886).

Morveau, M. Guy de. See BALLOONING.

Moselle Canalisation. See ENGINEERING.

Mostyn, Llewellyn Nevill Vaughan Lloyd-Mostyn, 3rd Baron (creat. 1831), was b. 1856, and succeeded his grandfather 1884.

Moulmein. See ENGINEERING.

Moulton, Mr. John Fletcher, M.P., F.R.S., F.S.A., etc., was b. at Madeley, Shropshire, 1844. Educated at New Kingswood School, Bath, and St. John's Coll., Cambridge. Senior Wrangler and First Smith's Prizeman (1868), in which year he won the gold medal for mathematics in the Univ. of London, and was elected a Fellow of Christ's College. Called to the bar at the Middle Temple (1874); Q.C. (1885). He is a Fellow of the Lond. Math. Soc., and of the Society of Arts. Returned in the Liberal interest as member for Clapham (1885).

Mount-Edgcumbe, William Henry Edgcumbe, P.C., 4th Earl of (cr. 1789), was b. 1832, and succeeded his father 1861. Was a Lord of the Bedchamber to the Prince of Wales (Nov. 1862 to June 1866), when he became an extra Lord of the Bedchamber to H.R.H., and Lord Chamberlain of the Queen's Household (1879 to May 1880).

Mount Sinai Inscriptions. See EGYPTOLOGY.

Mount Temple, William Francis Cowper-Temple, P.C., 1st Baron (cr. 1880), was b. 1811. Was a Lord of the Treasury (1841), Lord of the Admiralty (1846-52, and again Jan. 1853 to Feb. 1855), when he was made Under-Secretary of State for the Home Department; President of Board of Health (Aug. 1855 to Feb. 1857, and again from the Sept. following till March 1858); Vice-President of the Board of Trade and Paymaster-General (Aug. 1859 to Feb. 1860), and Chief Commissioner of Works and Buildings (1860-66).

Mount Washington. See BEN NEVIS OBSERVATORY.

Mount, Mr. William George, M.P., of Wasing Place, Newbury, Berks, was b. 1824, and educated at Eton, and Balliol College, Oxford. He is J.P. and Deputy Lieutenant for Berkshire, was High Sheriff (1877); is also Deputy Chairman of the Berkshire Court of Quarter Sessions, and chairman of the Newbury petty sessional division. Mr. Mount is a Conservative, and was returned for South Berkshire (1885).

Mousa, M. See MAHDI.

Mowbray and Segrave (creat. 1283); **Stourton, Alfred Joseph Stourton**, 19th Baron (1447), was b. 1829, and succeeded his father 1872. The 1st peer was a military commander and statesman (*temp.* Henry VI. The 7th Baron was executed for murder at Salisbury (1557); his son, however, being restored by Act of

Parliament, inherited the title, and was subsequently one of the peers present at the trial of Mary, Queen of Scots.

Mowbray, Sir John, P.C., M.P., D.C.L., was b. 1815. Educated at Westminster and Ch. Ch., Oxford. Called to the bar at the Inner Temple (1841). Deputy Lieutenant of Durham, and J.P. for Durham and Berks. He is a Church Estates Commissioner, and was Judge-Advocate-General (1858-59, 1866-68). Returned in the Conservative interest as member for Durham City (1853-68); Oxford Univ. (1868-85); re-elected 1885.

Mozaffar Eddin. See BOKHARA.

Mozambique. A Portuguese possession on the east coast of Africa, nominally extending from Cape Delgado to Delagoa Bay, over 1,200 miles. In reality the Portuguese only occupy a few points, to which their authority is limited. The chief of these settlements on the coast, mostly on islands, are Mozambique (the capital), Quillimane (at one of the entrances to the Zambesi), Sofala, Inhambane, and Lourenço Marquez, in Delagoa Bay. Up the Zambesi 120 miles is *Sena*, of little importance; 260 miles up is *Tete*, and 500 miles up the stations of *Zumbo* and *Chioova*. This territory has been in Portuguese hands since 1497, yet nothing has been done by them to open up the country. Government and trade are in the most debased condition. A small military force, composed of convicts and natives, is little respected. The slave trade continues in spite of laws against it. The coast is unhealthy, but rich in products. Gold has been worked at some places inland. Recently a splendid harbour has been discovered—*Nakala*, in Fernao Veloso Bay. The settlement in *Delagoa Bay* (*q.v.*), isolated and almost lost, has lately come into notice through the efforts made by the Boers to obtain it as a port for the Transvaal. (See ZAMBESI AND SHIRE.)

Muir, Sir William Mure, K.C.B., late Director-General of the Army Medical Department, d. June 2nd, 1885. He took his M.D. at Edinburgh in 1840, and received his commission in the army in 1842. He became full Surgeon (1854), Deputy Inspector-General (1858), Inspector-General (1861), Surgeon-General (1873), and Director-General of the Department (1874). He served upon full pay for nearly forty years, twenty-four of which were passed in foreign service, in the Mediterranean, Turkey, and the Crimea, the Mauritius, India, China, and North America.

Mukhtar Pasha, Ghazi Ahmed, one of the ablest and most scientific soldiers in the Turkish service. He was b. in Asia Minor, 1837, and educated at the Military Academy at Constantinople, where he studied four or five years. In 1860 he joined, with the rank of captain, the staff of the General conducting operations in Montenegro, and on one occasion so distinguished himself that he was both promoted and decorated. Returning to Stamboul, he was appointed Professor of Astronomy and Fortification, and (1864) tutor to the Sultan's eldest son, with whom he made a European tour, and was received with much distinction at the several courts. For his services in delimiting the Montenegrin frontier (1868-9) he was again decorated, and made a member of the Council of War. Soon after he was sent as second in command against the Arabs in Yemen, and assumed the chief direction of the opera-

tions when Redif Pasha fell ill. He became Governor (1871), and after crushing the insurrection returned to Constantinople (1873). He was mainly instrumental in putting down the rising in Bosnia and Herzegovina, was for a short time Governor of Candia, and subsequently held a command at Erzerum. When the war with Russia broke out he was despatched in hot haste to Armenia. It was in the operations here that he achieved the successes which obtained for him the coveted title of Ghazi (the Victorious). The Russians were at one time close to Erzerum, but by a series of masterly manœuvres he drew them from that portion of the country, and finally forced them to raise the siege of Kars. These successes, however, were short-lived. The Russians were strongly reinforced, and succeeded in interposing a considerable army between Mukhtar and Kars, and capturing a large part of his forces. Mukhtar was forced to fly, almost without an army, to Erzerum, leaving Kars to its fate. Since the war he has held several important military appointments, and towards the close of 1885 was despatched to Cairo to co-operate with Sir Henry D. Wolff in carrying out the terms of the Anglo-Turkish Convention with regard to the pacification and settlement of Egypt. He has filled all but the very highest offices in the Empire, and received from the Sultan every decoration that can be worn by a subject.

Mulholland, Mr. Henry Lyle, M.P., was b. 1854. Educated at Balliol Coll., Oxford. Returned in the Conservative interest as member for North Londonderry (1885).

Müller, Prof. Max. See SPELLING REFORM.

Muncaster, Josslyn Francis Pennington, an Irish peer, the second son of the third Lord Muncaster, was b. 1834. Served in the 90th Foot and the Rifle Brigade, and is captain of Cumberland Militia. He is Lord Lieutenant and Custos Rotulorum for West Cumberland (1876). Lord Muncaster entered parliament in the Conservative interest as member for West Cumberland (1872-85); re-elected 1885.

Mundella, Rt. Hon. Anthony James, M.P., P.C., F.R.S., son of the late Mr. Antonio Mundella, of Como, was b. 1825. Is J.P. for Middlesex and Nottingham. President of the Nottingham Chamber of Commerce, Vice-President of the Council of the Committee on Education (1880); President of the Board of Trade in the present Gladstone cabinet (1886). Returned in the Liberal interest as member for Sheffield (1868-85); Brightside Division (1885).

Munro, Mr. H. A. J. See BOOK TRADE.

Munster, William George Fitz-Clarence, 2nd Earl of (creat. 1831), son of the 1st Earl by his marriage with Miss Mary Wyndham, natural dau. of the 3rd Earl of Egremont, was b. 1824, and succeeded his father 1842. The 1st Earl was eldest son of King William IV. by Mrs. Jordan, the celebrated comic actress. This peerage is in remainder to the other sons of William IV., in the order of primogeniture, in default of the male issue of the 1st Earl.

Muntz, Mr. Philip Albert, M.P., was b. 1839. He is J.P. for Warwickshire. Returned in the Conservative interest as member for North Warwickshire (1884-85); Tamworth Div. (1885).

Munzinger, Prof. See OLD CATHOLICS.

Murchison, Sir R. I. See GEOLOGICAL SURVEY.

Murcia. See SPAIN.

Murdoch, Mr. Charles Townshend, M.P., of Buckhurst, Wokingham, Berks, was b. 1837, Educated at Eton. He is a magistrate for Berkshire. He served in the Crimean war (1855), as ensign in the Rifle Brigade. Mr. Murdoch is a member of the banking firm of Messrs. Ransom, Bouverie, and Co. He was elected in the Conservative interest for Reading at the late election (1885).

Murphy, Mr. William Martin, M.P., was b. 1844. He has been for many years engaged in the construction of railway works. Director of the Dublin and Belfast Tramway Cos., and of the Cork and Bandon Railway Co. He is a J.P., and Associate of the Institution of Civil Engineers of Ireland. Returned as a Nationalist for St. Patrick's Division of Dublin City (1885).

Murray. See VICTORIA.
Museum of Hygiene, The Parks. See SANITATION.

Musical Festivals. The earliest is the festival of the "Sons of the Clergy," held annually from 1790 at St. Paul's in aid of the funds of the charitable institution of that name. The next oldest is the festival of the **Three Choirs**, held triennially and alternately at Hereford, Gloucester, and Worcester, in their respective cathedrals, where oratorios are produced with great completeness; secular performances are given elsewhere in the town. The **Birmingham** festival, held triennially (beginning in 1768) is the most important of all. Its proceeds go to the General Hospital, which has altogether received £100,000 by this means. "St. Paul" was produced here in 1837, and Mendelssohn composed "Elijah" specially for Birmingham in 1846. Costa wrote "Eli" and "Naaman" for it in 1855 and 1864, and Gounod the "Redemption" and "Mors et Vita" in 1882 and 1885. Some new work of importance is always produced. The **Norwich** festival is held triennially (though at first not very regularly), and, like Birmingham, is for the benefit of the town hospitals. It began in 1770. Its greatest work hitherto is Mackenzie's "Rose of Sharon" (1884). The **Leeds** festival, also triennial and for the benefit of hospitals, dates from 1858. Other festivals, but of less importance and regularity, are those of Bristol, Liverpool, and York, Edinburgh and Glasgow. The **Handel Festivals** are remarkable for their colossal size (4,000 performers being the total number of band and chorus), and for their being limited to the works of Handel. They grew out of a commemoration festival held twenty-five years after Handel's death in Westminster Abbey (1784), and several times repeated later on. In 1857 a preliminary festival was held at the Crystal Palace, and in 1859, the centenary of Handel's death, the first great festival took place. 1885 being the bicentenary of Handel's birth, the series of triennial festivals was interrupted in order to commemorate that epoch.

Musicians, The Worshipful Company of. See CITY GUILDS, THE.

Music in 1885. A year that introduced to the notice of the public such important new works by British composers as Mr. Goring Thomas's opera "Nadeshda," Mr. F. H. Cowen's cantata "The Sleeping Beauty," Mr. E. Prout's third Symphony, Mr. A. C. Mackenzie's violin concerto, and Mr. C. V. Stanford's oratorio "The Three Holy Children," and that comprised in its operations four great festivals, cannot be regarded as uneventful in musical annals. Such

a record speaks well for the activity of the present race of native composers; but, of course, such good results would not be obtainable were the bulk of English-speaking music patrons indifferent to the productions of their own country. In this, as in other branches of art, Great Britain has at length given such proof of her right to be placed in the front rank of contributors, that now to speak disrespectfully or sneeringly of British music manifests but little knowledge of modern progress, and still less of public opinion unhesitatingly expressed. The year 1885 being the bicentenary of Handel's birth, it very early became apparent that the occasion was to be seized for the performance, to a much larger extent than usual, of the more celebrated of his works. The only notable attempt at a revival of his less known, and in several instances undeservedly neglected compositions, was made by the Sacred Harmonic Society. This Association reproduced "Belshazzar," which had not been heard in London for some years previously; and the same oratorio was chosen (with the "Messiah") as representative of Handel's genius at the **Bristol Triennial Festival** in the autumn. The **Crystal Palace** directors, who by means of the triennial Handel Festival have done so much to make the name of Handel a household word, could not allow the bicentenary to pass without some special demonstration. If, in view of the recurrence of the festival in 1886, a single grand performance had been settled upon, it must, to fulfil its purpose, have consisted of the "Messiah," or "Israel in Egypt," in part if not wholly; and such a performance might reasonably be expected to seriously affect the festival proper of the succeeding year. Eventually it was wisely decided to fix the Handel Festival for 1885 instead of 1886, and all who felt any interest in the matter warmly approved of the resolve. Thus the great Handel orchestra was in June again filled with its 4,000 chorists, instrumentalists, and principals, Mr. August Manns being the conductor, as in 1883. The programme, as before, consisted of the "Messiah," a selection, and "Israel in Egypt," and the meeting was in every way a success.—At Easter **Mr. Carl Rosa's Opera Company** took possession of Drury Lane Theatre for a longer season than usual. Two new operas were promised in Mr. Goring Thomas's "Nadeshda"—having a Russian subject—and **M. Jules Massenet's "Manon,"** the latter of which had been popular in Paris and elsewhere. Immediately on production both operas were received here with the highest favour. Virtually a separate cast of principals was engaged for each: Madame Valleria, Mr. Barton McGuckin, and Mr. Leslie Crotty appearing in Mr. Goring Thomas's opera; whilst Madame Marie Roze, Mr. Maas, and Mr. Ludwig, were in the French work, neatly turned into English by Mr. Joseph Bennett. There was little chance for the older operas in the *répertoire* after these novelties appeared on the bill; nevertheless Mr. Carl Rosa continued to play a few more standard works, and an interesting and prosperous season terminated with a capital representation of "La Nozze di Figaro," with a strong cast. There seemed no probability of Covent Garden Theatre being opened for the annual Italian opera season until Mr. Mapleson gladdened the hearts of operatic *habitues* by announcing that he had engaged Madame Adelina Patti for a brief series of performances, under the conductorship of Signor Arditì. The unrivalled *prima donna*,

who thus fulfilled her twenty-fifth consecutive season here, played several of her more familiar characters, and appeared for the first time as Carmen. The only other principal soprano was Mdlle. Alma Fohstrom, a vocalist who was said to have made a hit in Vienna, and who at Covent Garden created a favourable impression (but nothing more) as Lucia, Amina, and Gilda. Meantime the International Inventions Exhibition at South Kensington, with "Music" as its second department, was daily claiming its thousands of visitors. Here concerts were held very frequently in the Albert Hall, besides the band performances in the grounds; and there was a priceless loan collection of ancient musical instruments, manuscripts, portraits, etc.

—The first of the provincial music meetings of the year was the triennial gathering at Birmingham, for which extraordinary preparations, including commissions for seven elaborate new works, had been made. Each of the four days of the festival brought forward some novelty concerning which singular curiosity was aroused, though the lion's share was naturally carried off by M. Gounod's second trilogy "Mors et Vita," which it was anticipated would be conducted by the composer. Those, however, who at Birmingham had hoped to congratulate M. Gounod as they had congratulated him three years before, when he superintended the performance of his "Redemption," were doomed to disappointment. "Mors et Vita" was conducted by Herr Richter, the successor to the late Sir Michael Costa as the musical chief of the Birmingham Festival. Mr. Cowen's cantata "The Sleeping Beauty," Dvorak's cantata "The Spectre's Bride" (a very remarkable work), Mr. Stanford's oratorio "The Three Holy Children," Mr. Prout's new symphony in F, Mr. Mackenzie's violin concerto, and Dr. Bridge's setting of the "Rock of Ages," were, like M. Gounod's trilogy, warmly approved. It should be added that the Birmingham verdict has been fully endorsed by the Metropolis respecting all of these compositions that have found their way to London platforms. The Hereford Musical Festival (the Meeting of the Three Choirs) offered a cantata "St. Kevin," by Dr. J. Smith of Dublin, and a soprano solo with chorus, "The Song of Baldir," by Mr. C. H. Lloyd, as its only novelties; and Bristol fell back upon established successes, with Mr. Charles Hallé as conductor. The Philharmonic Society had a good season, with Sir Arthur Sullivan as conductor; and the Monday Popular Concerts, the Crystal Palace Concerts, the Sacred Harmonic Society, the Royal Albert Hall Choral Society and the London Ballad Concerts executed the same valuable functions in Metropolitan musical existence as for some years past. Novello's Oratorio Concerts, conducted by Mr. A. C. Mackenzie, and the Brinsmead Symphony Concerts, are new musical enterprises that promise exceedingly well.—The list of comic operas of the year is headed by "The Mikado" (one of Messrs. Gilbert and Sullivan's brightest efforts) at the Savoy; and merit in varying degree has been evinced in Messrs.

H. Paulton and E. Jakabowski's "Erminie" (the Comedy Theatre), Messrs. H. Herman and Edward Jones's "The Fay o' Fire" (at the Opera Comique), and Messrs. Hamilton and Fullerton's "The Lady of the Locket" (at the Empire).

Musurus Pasha, Constantine, Turkish ambassador to England, b. at Constantinople in 1807. He began his diplomatic career as the secretary of the Prince of Samos (1832). At the time of the rebellion of Samos, Musurus was chosen for the task of pacifying the islanders. The constitution and reforms which he gave them brought them back Turkish rule. His next appointment was that of Envoy Extraordinary and Minister Plenipotentiary to the Court of Greece (1840). In 1848 he was promoted to the post of representative of Turkey at Vienna, afterwards becoming Envoy Extraordinary and Minister Plenipotentiary to the Court of St. James's, an office he retained from 1856 to 1885, when he was succeeded by Rusdem Pasha (q.v.) He was made a Muchir and a Pasha in 1867, and possesses the order of the Osmanlieh, and the Medjidie.

Mutiny Act. In strictness there is no longer a Mutiny Act. From the time of the Revolution of 1689 down to the year 1879, the discipline of the army had been maintained by an annual Mutiny Act, and by the articles of war which the sovereign was by that Act empowered to make. In the year 1879 the contents of the Mutiny Act and of the Articles of War were consolidated into the Army Discipline and Regulation Act, which formed a complete military code, and was renewed by annual Acts from year to year. But in the year 1881 it was entirely repealed, with the exception of one section, and was replaced by a new military code known as the Army Act, 1881. This Act contains 193 clauses, has five schedules, and fills 100 octavo pages. It therefore does not admit of a brief summary. Like the Army Discipline and Regulation Act and the old Mutiny Acts, it is renewed only for the space of a year at a time, in order to preserve the control of parliament over the standing army. Were it to expire, the soldier would again become a citizen, subject only to the common law. He could no longer be punished for disobeying his officers or quitting his colours.

Mutsuhito. The present Mikado (or Emperor) of Japan; b. 1852. Ascended the throne in 1867. His reign has been marked by great reforms, prompted by a liberal spirit, resulting in abolishing entirely the feudal system which has impeded the general progress of the country. Under the rule of the present Mikado, Japan has entered into an unprecedented era of prosperity. Civilisation has made rapid progress, and the introduction of Western arts and ideas has secured for Japan a foremost place amongst the Asiatic nations.

Mutualists. See ANARCHISM.

Mutual, The (of New York). See FIRE AND LIFE INSURANCE.

Myriapoda. See ZOOLOGY.

N

Nacaa. See COOLIE.

Nachtigal, Dr. See SOUDAN.

Nadar, M. See BALLOONING.

Nadir Shah. See AFGHANISTAN.

Namak. See SIKHS.

Nankin, Treaty of. See CHINA.

Nanvoo. See MORMONISM.

Naphta. See ILLUMINANTS.

Napier, Francis Napier, 9th Baron (creat. 1627); Baron Etrick (1872), by which title he holds his seat in the House of Lords, son of the 8th Baron, was b. 1819, and succeeded his father 1834. Held various important diplomatic posts: was Governor of Madras (June 1866 to Jan. 1872), and was then Acting Viceroy of India *pro tem.*, on the death of Lord Mayo. Enjoys a pension of £1,700 per annum. The family numbered amongst its members Sir John Napier, the inventor of logarithms; Lieut.-Gen. Sir Charles James Napier, of Indian celebrity; and Gen. Sir William Napier, author of "The History of the Peninsular War."

Napier of Magdala, Robert Cornelius Napier, P.C., 1st Baron (cr. 1868), was b. 1810. Was brigade-major in the Sutlej campaigns (1845-6), where he was severely wounded; acting Chief Engineer during part of the siege of Moulton, where he was again wounded; commanded the Engineers during the operations which ended in the capture of Lucknow (1858); was made K.C.B. for his services (1858), and received the thanks of Parliament (1859). Again received the thanks of Parliament (1861) for the "skill, zeal, and intrepidity" shown in the operations which terminated in the capture of Peking. Appointed to conduct the expedition to Abyssinia (Oct. following), on the successful conclusion of which, and capture of Magdala, he once more received the thanks of Parliament, was created a peer, and granted a provision of £2,000 per annum for himself and his next heir.

Nascent State. See ATOMS AND MOLECULES.

Nasser-ed-Deen, Shah of Persia, son of the late Mehemet Shah; b. in 1829. He ascended the throne in 1848. In 1852 he occupied Herat, when an expedition under General Outram was sent against him, and after a very successful campaign compelled Persia to sign a treaty of peace at Paris, on terms favourable to England. The Shah, in his warfare against the wild tribes surrounding his dominions, has been generally victorious. Under his reign a treaty uniting Europe and India by telegraph across Persia was signed in 1866 at Teheran. In 1873 he made a tour in Europe, and met with a cordial reception in London and elsewhere. The Shah may be called upon to play an important part, in the event of England being engaged in military operations against Russia on the northern frontier of Afghanistan.

Natal. A British colony, situated on the south-east coast of Africa, about 800 miles from Cape Colony. Port Natal, now called D'Urban, was discovered by Vasco de Gama on Christmas Day (Natal), 1497, and hence the name. The sea-board of the colony extends from the Umtamfuna river on the south, to the Tugela on the north, a distance of 170 miles. Zululand borders the colony on the N.E., Transvaal on the N., Orange Free State and Basutoland on

the W., Transkeian Territories on the S.W. Area 18,750 sq. miles; pop. 424,495: consisting of whites, 35,453; natives, 361,766; Indian and Chinese coolies, 27,276. The capital is Pietermaritzburg, pop. 14,429; the only port is D'Urban. Other centres inland are Verulam, Isipingo, Richmond, Ladysmith, etc. The colony is divided into fourteen districts. There are 105 miles of railway, and 120 more constructing. The numerous rivers are not navigable, although some of them are considerable streams, so that the country is well watered and fertile. The climate is very fine: the winter bright and tolerably cool, and the summer heat tempered by cloud and rain. The coast scenery is bold, and the whole country inland romantically beautiful, being dominated everywhere by the precipitous heights of the Drakensberg, some of the peaks of which attain an altitude of 9,500 feet. The low-lying coast-land, extending about fifteen miles inland, is highly fertile, and has been found suitable for the growth of sugar, coffee, arrowroot, spices, tobacco, cotton, flax, silk, and tropical fruits: at present sugar-growing is a profitable and flourishing industry. For sugar cultivation it has been found necessary to introduce Indian coolies (*q.v.*) and Chinese. Coal and lime are worked; iron, copper, and probably gold exist. The native fauna and flora are extensive and interesting; the hippopotamus is still to be found, as also crocodiles, iguanas and chameleons, leopards, hyenas, tigers, etc. Timber trees are numerous and valuable, especially the yellow wood, the stink wood, and the iron wood. The midland region is well adapted for cereals and European farming. The upper region, mountainous, is pastoral—sheep, cattle, and horses being reared in great numbers. Little was known of Natal until 1824, when Lieutenant Farewell settled a few white colonists near the port, by permission of Chaka, the Zulu king. At his death, four years later, the settlement was broken up. In 1837 a party of Dutch Boers (*q.v.*) "trekking" from Cape Colony, settled in Natal. Their systematic ill-treatment of the blacks soon led to war. A great number of them were treacherously massacred by Dingaan, Chaka's successor. But in 1839, the Boers, being reinforced, overthrew Dingaan in a great battle, in which 3,000 Zulus were slain, and placed Panda, a brother of Dingaan, on his throne. Owing to these disturbances, the Governor of the Cape sent troops to take possession of Natal. But they were shortly withdrawn, only that more had soon to be dispatched, in 1840. In 1843 Natal was declared to be a British colony, and many of the Dutch again crossed the Drakensberg. In 1849 numerous British settlers located themselves in Natal. In 1853 a bishopric was created, under Bishop Colenso. In 1856 Natal was erected into a separate colony, distinct from the Cape. In 1873 there was an outbreak of the Amalubi Kaffirs, under Chief Langalibalele. Colonial troops were employed to quell it. Langalibalele and others were brought to justice, transported and imprisoned, though afterwards amnestied. The question of native government was brought into prominence. The Imperial authorities sent out Sir Garnet Wolseley (*q.v.*) as administrator, and in 1875 an

Act came into force for the better management of native affairs. In 1879 Natal became the base of operations in the Zulu war (see ZULULAND). The colony has representative government. There is a Governor, an Executive Council of officials, and a Legislative Council of thirty members, of whom seven are nominated by the Governor and the remainder elected by property-holders in the boroughs and counties. There is a force of 350 mounted police and 523 volunteers. Revenue, £610,936; expenditure, £746,808; debt, £3,215,445; imports, £1,675,850; exports, £957,918—these imports and exports being only those with the United Kingdom. (Consult Peace's "Our Colony of Natal," Brooks' "Natal," and Gillmore's "Great Thirst Land.")

National Debts of the Principal Countries of the World.

Austro-Hungary	...	...	£380,000,000
Belgium	...	...	85,216,000
Bolivia	...	...	6,000,000
Brazil	...	...	18,486,700
Burmah (King's revenue)	...	...	800,000
Canada	...	...	40,431,820
Cape of Good Hope	...	...	19,671,859
Ceylon	...	...	2,124,108
Chili	...	...	17,579,960
China	...	...	3,573,200
Columbia (about)	...	...	2,250,000
Costa Rica	...	...	4,000,000
Denmark	...	...	550,400
Ecuador	...	...	2,000,000
Egypt	...	...	4,020,284
France	...	...	786,116,960
Germany	...	...	33,279,991
Great Britain	...	...	746,423,964
Greece	...	...	21,091,034
Guatemala	...	...	2,000,000
Hayti	...	...	4,000,000
Honduras	...	...	5,397,770
Hong Kong	...	...	Nil.
India	...	...	159,274,460
Italy	...	...	21,058,707
Japan	...	...	67,073,237
Liberia	...	...	163,000
Mauritius	...	...	759,600
Mexico	...	...	19,708,358
Natal	...	...	2,554,000
Netherlands	...	...	90,058,967
New South Wales	...	...	21,632,459
New Zealand	...	...	31,385,411
Orange Free State	...	...	Nil.
Paraguay	...	...	3,592,213
Peru	...	...	32,953,000
Portugal	...	...	106,462,914
Queensland	...	...	14,907,850
Roumania	...	...	29,324,130
Russia	...	...	108,500,000
San Domingo	...	...	714,300
San Salvador	...	...	141,160
Servia	...	...	800,000
Siam	...	...	Nil.
South African Republic	...	...	380,750
South Australia	...	...	13,891,900
Spain	...	...	233,100,000
Sweden and Norway	...	...	5,925,441
Switzerland	...	...	1,319,289
Tasmania	...	...	2,385,600
Tunis	...	...	5,702,000
Turkey (or Tributary States)	...	...	250,000,000
United States	...	...	366,105,784
Uruguay	...	...	11,127,000
Venezuela	...	...	7,721,616
Victoria	...	...	24,308,175
Western Australia	...	...	612,000

"National" (French Liberal paper). See THIERS, LOUIS ADOLPHE.

National Insurance. During the last session of parliament a select committee was appointed to inquire into the best system of National Provident Insurance against pauperism. The appointment of this committee was doubtless prompted by the publication of the Rev. Canon Blackley's scheme for providing sick pay and a deferred annuity by means of a general contribution of £10 to a national fund by all persons between the ages of eighteen and twenty-one. The Chief Registrar of Friendly Societies in his last return, referring to this scheme, says that previous to the appointment of the select committee he had not felt called upon to pass any opinion upon it, as he regarded it as lying entirely outside the province of his office. Having been asked, however, to give evidence upon it before the Committee, he "felt bound frankly to express the conviction that the scheme proposed was inequitable, impracticable, and, if it could be put into practice, dangerous to the welfare of the community, and that no state insurance of sick pay was practicable, at all events in a country constituted like our own." In a paper printed for the use of the committee, Mr. Sutton endeavoured to show that no trustworthy data exist from which rates of contribution to such a fund as that proposed by Canon Blackley could be arranged. The select committee reported the evidence taken by them to the House of Commons, and recommended their reappointment next session.

Nationalisation of the Land. See LAND QUESTION, THE.

National League, founded in October 1882. In many respects it is like the Land League of Ireland, which had been suppressed in the previous year; but it differs in putting into a more prominent place the demand for self-government; the Land League being mainly concerned with the land question. For two years the new organisation made but slow progress, but after that period it rapidly grew, and now has branches in nearly every town and village in Ireland; and at its fortnightly meetings subscriptions, amounting sometimes to upwards of £2000 and £3000, are announced from Ireland and America. Its President is Mr. Parnell; but its chief work is done by Mr. Timothy Harrington (*q.v.*), the secretary, and M.P. for one of the divisions of the city of Dublin. In America a similar organisation exists under the presidency of Mr. Patrick Egan, formerly treasurer of the Land League; and in England there is another body for the organisation of the Irish vote, of which for three years Mr. T. P. O'Connor (*q.v.*), M.P. for the Scotland Division of Liverpool, is president.

National Liberals. See GERMAN POLITICAL PARTIES, and GERMANY.

National Press Agency. See NEWS AGENCIES.

"National Review," a monthly magazine founded March 1883 (2s. 6d.), treating political, social, and general questions from a Conservative standpoint, its motto being that of Lord Beaconsfield—"What is the Tory party unless it represents National feeling?" Joint editors, Messrs. Alfred Austin and W. J. Courthorpe.

National Society (an abbreviation of "National Society for the Education of the Poor

in the Principles of the Established Church throughout England and Wales") was instituted in 1811 as an offshoot of the Society for Promoting Christian Knowledge (*q.v.*). Its functions are to make building grants towards erecting and enlarging public elementary schools; to publish improved schoolbooks; to make grants of schoolbooks, alone or in conjunction with diocesan societies; to make grants towards furnishing and fitting out schools; to contribute to the erection of training colleges, etc. From a statement published by the Society, it appears that during a period of nearly fifty-eight years—October 1811 to March 1869 (prior to the passing of the Education Act of 1870) the disbursements amounted to £863,203; and during the last fourteen years the Society has voted £149,700 in aid of building and enlarging schools in 3,333 places, providing accommodation for 410,308 additional children. Their depository at Westminster supplies books, school appliances, etc., to Church schools in connection with the Society, while there are local branches and depositories in many of the large towns. Offices: Broad Sanctuary, Westminster.

National Temperance League. See **TEE-TOTALISM.**

National Union of Miners. See **MINING.**

Natural Selection. The real Darwinian theory. This latter phrase is often inaccurately applied to **evolution** (*q.v.*). The idea of evolution in its limited sense—*i.e.* that all living species have evolved from pre-existing forms—was pre-Darwinian. To this, as opposed to the notion of special creation, many thinkers had given in their adhesion. **Erasmus Darwin**, of Englishmen; **Goethe**, among the Germans; and the Frenchmen **Lamarck** and **Geoffroy St. Hilaire**, had all declared in favour of evolution as a general principle. But **Charles Darwin** (*q.v.*) was the first to show *how* evolution had taken place. As the result of twenty-eight years of observation, experiment, record and reflection, he arrived at the generalisation known as **natural selection** or the **survival of the fittest**. The chain of reasoning is as follows:—(1) Living beings vary, whether the variations are the result of heredity or adaptation. (2) There is a struggle for existence among living things generally, and between the individuals that belong to the same species (*i.e.* are closely allied) especially. (3) Any variation in a plant or animal that gives its possessor any advantage in the fight for life is likely to be preserved, transmitted, intensified, and to become lasting; any variation not giving such advantage is likely to die out again. For those living things that have this favourable variation are more likely to survive than their fellows who have it not, and are more likely to have offspring to whom they will transmit the particular variation in structure or in function. Such of these as have it more marked than their fellows will be more likely to survive and to have offspring than those fellows. The fittest for the particular conditions of life survive or are naturally selected. The idea of natural selection was broached almost simultaneously by **Alfred Russel Wallace** and by **Charles Darwin**. Both have brought forward facts in its support. But the former would be the first to admit that the latter, both by the number and nature of his accumulated facts and by the irrefragable reasonings on these, has been the thinker who has first established

and then nationalised the idea of natural selection. (See Darwin's "**Origin of Species**," "**Animals and Plants under Domestication**," and other works.)

"**Nature**," a scientific journal and review (weekly 6d.), founded November 4th, 1869. Treats of current scientific topics, with articles contributed by the leading specialists of the day. Its columns are also open to correspondence on scientific questions. Editor, **Mr. Norman Lockyer** (1869).

Naval Construction and Equipment. See **NAVY, BRITISH.**

Naval Guns. See **ARTILLERY.**

Naval Volunteers were first raised under the "Royal Naval Artillery Volunteer Act" of 1873. The object in establishing this corps was to bring together a body of trained men who, in any time of danger, would be useful for the defence of our coasts, and of the most important harbours, rivers and estuaries in the country. From the Government the corps obtained ships, guns, and the other requisites of naval warfare, but no grant was agreed to, as in the case of the land volunteers. A subscription of one guinea a year is therefore levied on each member, half of which is devoted to the **Brigade Fund**, the remaining moiety going to the **Battery Fund**. At present (1886) there are three **Brigades** of the Naval Volunteers—namely, one at **London**, one at **Bristol**, and one at **Liverpool**; and the establishment of each **brigade**, which may consist of four, six, or eight batteries, is laid down by the Admiralty as follows:—one lieutenant commander for each brigade, and for each battery of the same two sub-lieutenants; one chief petty officer, two first-class petty officers, two second-class petty officers, two buglers, and a staff consisting of lieutenant instructor, first-class petty officer instructor, a surgeon, bugle-major and armourer; and there are besides from 51 to 7 leading gunners and gunners equivalent to leading seamen and able-bodied seamen. Of the three brigades, that at **London** is the oldest and numerically the strongest. It is under the command of **Lord Ashley**, and consists of three corps—namely, (1) **London** corps, numbering 321 members; (2) **Brighton** corps, numbering 50 members; and (3) **Hastings** corps, with 46 members—making an aggregate strength of 417. The Admiralty has given this brigade the use of two ships—namely, **H.M.S. President**, lying at the West India docks, and **H.M. Gunboat Rainbow**, moored off Somerset House; drill taking place on board the former vessel every evening between six and eight o'clock. The **Rainbow** is only used as an armoury, and for boating purposes. The duties of the Naval Volunteers consist of "great gun drill," in which they have to run out, level, and fire a 7-inch 64-ton gun with all the dexterity, precision, and agility of a true "blue-jacket," and of exercises with small arms (rifle, pistol, and cutlass). All drills are carried on as in the Royal Navy, and from them no deviation is permitted. On the subject of dress the Rules of the **London Brigade** of the Royal Naval Volunteers are emphatic, requiring all members, when on duty, to be in uniform, and strictly forbidding the practice of appearing in partial uniform. An interesting feature of the **London Naval Volunteer Brigade** is the **gunboat cruise** made every year, generally about August, for eight or ten days, of which advantage may be taken by all members who are able to show, in their returns, a regular attendance at

drill for three months. The **Naval Volunteer Act of 1873**, having placed these volunteers under the control of the Admiralty, they are subject to all the regulations made with regard to them by that department. The regulations already issued number not less than 123, and enter into the minutest details respecting the corps. It may be added that, while assembled with the regular forces of the army, either in camp or for training, Naval Volunteers come under the Naval Discipline Act of 1866, in the same manner as if they were on actual service, and will be placed under the immediate command of an officer of Her Majesty's Navy. The efficiency and services rendered by the present members of the Naval Volunteer Corps have been officially recognised.

Navy, The British. Since the introduction of steam-propulsion into the British navy, about forty years ago, this branch of the national defences has undergone many changes. One of the most striking results of the process that has been going on has been the improvement, from off the face of the waters, of the "wooden walls of old England," which were the pride and boast of the people through so many generations. In place of the stately three-decker, which carried her tiers of guns high above the water, we have an unsightly fighting machine of the most complex construction, formed almost entirely of steel, and armed with weapons of a form and size never dreamt of in Nelson's time. We shall briefly trace the progress of the transition. With a view to testing the applicability of steam as a means of propulsion for war-ships, the Admiralty, in 1843, built the *Rattler*, a vessel of 900 tons. In her the various kinds of screw propellers which had been patented up to that time were tried, and the experiments resulted in the **Smith Screw** being adopted. So rapidly was the work of converting sailing-ships into steamers carried on that when Admiral Dundas was ordered to the Baltic during the Russian war, in 1854, every one of the fifty vessels composing his fleet was propelled by steam. The introduction of steam led to a reduction of the number of men carried by the respective ships, for to the new agent was assigned much of the heavy work on board. It also necessitated changes in naval tactics, and generally set busy minds to work in devising further improvements. The consequence has been the creation of an entirely new system of naval warfare. Following the introduction of steam propulsion came the change from wood to iron in the construction of war-ships. In the year 1834, by which time several iron steamers were in existence, the Admiralty undertook some experiments to test the suitability of iron as a material for ships of war; but it was concluded that iron vessels could not be made shot proof, and the idea was abandoned for a time. In the course of the Crimean war the emperor of the French ordered some iron-plated floating batteries to be constructed, and the use of these proved so satisfactory that it was resolved to cover the wooden frigate *La Gloire* with iron plates four inches thick. Stimulated by these examples, the British Admiralty had a number of plated floating batteries built, and orders were given for the construction of the *Warrior*, the first of our ironclad fleet. Other vessels followed rapidly, each being an improvement in some respect on its predecessors. Wood was entirely discarded in the construction of the ships. The calculation at the outset was

that armour plates $\frac{1}{2}$ inches in thickness would suffice for all requirements, as such plates resisted the shot of the heaviest guns afloat. But outside the Admiralty there were quiet but close observers of what was going on, and in due time these announced themselves. They were then known as plain **Mr. Armstrong** and **Mr. Whitworth**, and they introduced to notice guns and projectiles before which the $\frac{1}{2}$ -inch armour plate could not stand for an instant. The makers of iron plates were now moved to action, and by making their plates thicker and thicker sought to checkmate the artillerymen. The story of the contest between these two sets of men is one of the most remarkable connected with the arts of war. Its outcome is the **110-ton gun**, throwing a projectile weighing nearly a ton to a distance of five or six miles; and armour plates twenty-four inches in thickness, composed partly of iron and partly of steel. Important modifications have, at the same time, been made in the dimensions and forms of the war-ships. Side by side with this competition of artillerymen and plate-makers, has been going on the development of the use of the **torpedo**; and here again marvellous progress has been made. Though the sides above and for some distance below the water line are protected by armour plates, the bottoms of war-ships are necessarily of comparatively slight construction, and present a vulnerable point which the torpedo is designed to operate upon. On being discharged from the attacking ship, the torpedo, propelled by a tiny screw worked by compressed air, makes its way, at a depth of ten or twelve feet from the surface, to the side of the vessel it is designed to injure; and should it reach its destination it explodes on contact, and inflicts damage which may be sufficient to sink the ship. As a protection against the torpedo, war-ships are now provided with a strong **netting**, composed of iron rings, which is suspended from booms all round at such a distance from the ship as to render the explosion of the torpedo innocuous when its charge is ignited by contact with the netting. But, in addition to the large war-ships being furnished with torpedoes, the fleet has attached to it a swarm of **torpedo boats**. These craft are built of steel, and are capable of steaming from sixteen to twenty knots an hour. Their business is to dash in upon an enemy's ship, discharge a torpedo against her, and get out of the way as speedily as possible. The creation of this craft has led, as in other cases, to the adoption of means to cope with her. The **electric search light** has been chiefly devised to enable her approach to be seen; the machine gun stands ready to destroy her when she comes within range; and, lastly, the **torpedo catcher** will be constantly on the outlook for her. The torpedo catcher is the swiftest of small steamers, and her business is to cruise round the ship she is attached to during the night, and with her machine guns demolish any hostile torpedo craft that she may come across. Such is the present composition of the navy; but costly experiments still go on, and there is no predicting what changes a few more years may produce. The effect of the changes in the construction and the equipment of our war-ships is forcibly seen when we compare our navy of to-day with that which we possessed when the Russian war broke out in 1854. In that year we had about 520 ships in the navy, of which less than one-half were

steamers; and they carried, in the aggregate, 17,000 guns, 33 of them having 100 guns or upwards each, and 72 from 70 to 100 guns each. The most formidable guns carried were the smooth-bore 68-pounders, and these bore but a very small proportion to the 32-pounders and lighter pieces. To-day (1886) our sea-fighting power is concentrated in 63 iron-clad ships, and a hundred or so of torpedo boats, with the necessary training ships, tenders, etc. In place of the 17,000 guns carried by the fleet of 1854, our present fleet carries only 609 guns, if we except the Gatling and Gardner machine guns, with several of which each vessel is furnished. There is, however, a wide difference between the guns of the two periods. The *Inflexible*, the largest and strongest vessel in the fleet, carries only four guns, but they weigh 80 tons each. The *Anson*, when equipped, will carry two 100-ton guns. Besides these gigantic weapons, there are, throughout the fleet, twenty 63-ton, twelve 43-ton, and four 35-ton guns. The ships themselves have also enormously increased in size and strength. For example, the ten ironclads which compose the first class of our navy range from 9,150 to 11,880 tons each, are propelled by engines ranging from 8,210 to 6,000 horse-power, and are protected by armour from 10 to 24 inches thick. Considerable additions were made to the navy during the past year (1885), and the present year is to be a busy one in the dockyards; while the construction of several large ships and a number of torpedo craft is in progress in private yards. The navy estimates for 1886-7 are £12,993,100, as compared with £12,386,500 for 1885-6. (See APPENDIX.) Sir Thomas Brassey, in comparing the navies of England and France, brings out the following results:—

Armoured Ships. 1885.

ENGLAND.			FRANCE.	
Class.	Ships.	Displacement.	Ships.	Displacement.
1st . .	13	122,010	3	29,860
2nd . .	14	86,310	12	86,030
3rd . .	14	112,410	13	61,800
Coast Defence	14	41,530	12	34,200
Total .	55	362,260	40	211,890

The relative position in 1890 will be:—

ENGLAND.			FRANCE.	
Class.	Ships.	Displacement.	Ships.	Displacement.
1st . .	22	210,450	10	103,140
2nd . .	22	134,730	18	125,920
3rd . .	12	98,380	4	19,630
Coast Defence	14	41,530	19	42,080
Total .	70	483,090	51	290,770

Needle Makers, The Worshipful Company of. See CITY GUILDS, THE.

Negroes. See SOUDAN.

Nelson, Horatio Nelson, 3rd Earl (creat. 1805), was b. 1823, and succeeded his father 1835. The 1st peer was the celebrated Admiral Sir Horatio Nelson, K.G. A pension of £3,500 per annum was attached to the peerage for his own life and his two immediate successors.

Nelson, Sir Thomas James, City Solicitor a. Feb. 14th, 1885, in his 50th year. He was educated at the City of London School, and the College of Saxe-Coburg. He was admitted a solicitor (1848), and practised in the City until 1862, when, upon the death of Mr. Charles Pearson, he was appointed City Solicitor, and filled that office until his death. He received the honour of knighthood (1880). He acted as Remembrancer as well as City Solicitor during the long litigation between the Corporation and Mr. Robartes.

Nepaul. See GHOURKAS.

Neptune. See ASTRONOMY.

"New and Latter House of Israel." See JEZREELITES, and ANGLO-ISRAELISM.

Newark, Viscount, of Holme Pierrepont, Notts, was b. 1834. Educated at Eton. Entered the army (1872), ret. (1880). For a time captain in the South Notts Yeomanry Cavalry. Returned in the Conservative interest as member for Newark Division of Notts (1885).

New Brunswick. See CANADA.

Newcastle. See MINING.

Newcastle, Henry Pelham Archibald Douglas Pelham-Clinton, 7th Duke of (creat. 1756); b. 1864; succeeded his father 1879. Is descended from John Baron Clinton, temp. Edward I. The 9th Lord Clinton, an eminent naval commander, obtained the earldom of Lincoln from Queen Elizabeth. The 5th Earl was a distinguished minister, War Secretary, Colonial Secretary, etc.

Newcastle, Rt. Rev. Ernest Roland Wilberforce, 1st Bishop of (founded 1882), son of the late Rt. Rev. Samuel Wilberforce, Bishop of Winchester; b. 1840; canon residentiary of Winchester (1878-82), when he was consecrated to this see.

Newfoundland. A British colony and island lying N.E. of the Gulf of St. Lawrence. Area 40,200 sq. miles, excluding the territory of Labrador on the mainland and the Isle of Anticosti, which appertain to this colony. Pop. about 185,000. First settled in 1623. Received responsible government in 1855. Governor and ministry form executive. Two houses of parliament: Legislative Council of 15 members called by Governor; House of Assembly of 31 members, elected every four years on a low suffrage. Revenue, £283,033; expenditure, £257,171; debt, £322,773; exports, £1,400,244; imports, £1,670,044. Capital St. John's; pop. 22,553. Villages on Avalon Peninsula. Interior uninhabited, but railway now being constructed across. Great Bank to southward, shallow seas where Gulf Stream and Arctic Current meet; ever foggy, but teeming with fish, especially cod. Winter long, severe, damp; summer dry, short, hot. Much mountain, rock, waste, and swamp. Alluvial tracts, lightly timbered. Climate adverse to agriculture. Some dairy-farming. Valuable coal-beds and copper mines. Some fur-bearing game, deer, dogs, etc. Exports are codfish, cod-liver oil, seal oil, seal-skins, and copper ore. (Consult Hutton and Harvey's "Newfoundland," Murray's "Survey

of Newfoundland," etc.) **Labrador** a rocky wilderness, inhabited only by Eskimo, Moravian missionaries, and a few sealers and hunters. Anticosti barren and desolate. Atlantic cable lands in Heart's Content Harbour, Newfoundland.

New Guinea, or Papua. An island lying directly N. of Australia, and said to be the next largest island in the world. It is about 1,500 miles from E. to W., with a breadth at centre of 400 miles. The area is now computed to be 305,900 sq. miles. Since 1828 the Dutch have laid claim to the western half of the island, establishing some unimportant trading stations, but failing to colonise or even explore the country. In 1864 New Guinea first began to come within the range of Australian politics. At that date, and at sundry periods since, efforts were made to induce the Imperial Government to annex the eastern half of the island. Private enterprise, public agitation, and the recommendations of colonial governments alike failed in this object. The Imperial Government declined to annex, and steadily discountenanced all attempts at colonisation. In 1876, however, the Western Pacific Commission was constituted, and a deputy-commissioner appointed to reside in New Guinea. The Commission, however, which originally amounted to little short of a protectorate, was suffered to become ineffective by the succeeding Ministry. In 1883 matters came to a crisis, owing to the action of certain European Powers. Urgent appeals from the colonial executives were sent to the Home Government, praying that New Guinea might be annexed, on the ground that the establishment of a foreign power there would be dangerous to Australian interests. These appeals being disregarded, in May 1883, Sir Thos. McIlwraith, the then premier of Queensland, sent a magistrate to New Guinea to take possession on the part of his government. The step, though precipitate, has been since shown by events to have been fully warranted. It was promptly and warmly endorsed by all the Australian governments. But the Colonial Secretary (Lord Derby) refused to ratify it. A serious agitation in Australia was the result. In November 1883 the Inter-Colonial Convention assembled at Sydney, strenuously advocating immediate annexation. Germany soon after openly obtained a footing on the north of the island. At last, in Nov. 1884, the Imperial Government was prevailed on to send Commodore Erskine to New Guinea; and the south coast, from the East Cape to the 141st meridian, E. long., was formally annexed. During 1884-5 there was considerable dispute between the German and English governments, from which the latter emerged in a humiliating light. A joint commission was finally appointed, and boundaries settled. That half of the island lying west of the 141st meridian is assigned to Holland, and comprises 150,755 sq. miles. The boundary between the German territory on the north, now called **Kaiser Wilhelm's Land**, and the English territory on the south starts from the N.E. coast on the 8th parallel of S. lat., and follows it to intersection with 147th meridian; thence N.W. to intersection of 6° S. lat. with 144° E. long.; thence W.N.W. to intersection of 5° S. lat. and 141° E. long. Adjacent islands N. of 8° lat. are German, south of it English. **Kaiser Wilhelm's Land** contains 68,785 sq. miles; the English territory 86,360 sq. miles.

Port Moresby is the official centre of our possession, and where the Administrator will have his headquarters. Colonisation and the acquisition of land by British subjects are still forbidden. The island is rich in tropical products, possesses a copious and peculiar flora and fauna, and is suitable for tropical agriculture. The coast is miasmatic, the mountainous interior reported healthier. It is little known as yet, but exploring expeditions are now at work. The natives, a black Negrito race, called Papuans, are numerous. Some tribes are disposed to be friendly; others are fierce and intractable. German settlers have been recently massacred, as were the Dutch in past times. (Consult Chalmers & Gill's "Work and Adventure in New Guinea"; D'Alberti's "New Guinea"; Bastian's "Der Papua"; *The Scottish Geographical Magazine* for Oct. 1885, etc.) See also QUEENSLAND.

New Jerusalem Church. A religious body, sometimes designated the New Church, sometimes Swedenborgian, consisting of those who believe the theologian **Emanuel Swedenborg** (d. 1772) was inspired by Christ, whom he taught to be the only God, in whom exists the Divine Trinity, to explain a deeper spiritual meaning of the Word of God, and possessed special insight of the objects of the spiritual world. Swedenborg's writings were introduced into this country by a clergyman of the Church of England, the **Rev. John Clowes**, rector of St. John's, Manchester. He translated the greater portion of Swedenborg's works, especially his greatest work, the "**Arcana Coelestia**," in thirteen volumes. The **Rev. William Hill**, also a clergyman, translated the work second only in importance to this, the "**Apocalypse Explained**," (6 vols.) The **Rev. Thomas Hartley**, a clergyman, translated "**Heaven and Hell**" (1 vol.) Very early, some clergymen, and others who had been Methodist preachers, students of Swedenborg, formed a separate organisation for worship (1788), which has continued and increased. At the present time there are 75 societies, with 6,000 members, and a large number of hearers who are not members. They have Sunday-schools with 7,000 children, and day-schools with 6,000 scholars. There are twelve societies in London and its neighbourhood, and in various parts of the country there are believers of the teachings of Swedenborg who worship with the Church of England or with some of the other religious bodies. In America the number of the societies of the New Jerusalem Church is much greater; and in every foreign country, both in Europe and elsewhere, they possess numerous and zealous adherents. The body is governed by a **Conference** in Great Britain, which meets annually, consisting of the ministers and of representatives of societies, from one to three according to the number of their members. The **creed** of the New Jerusalem Church is expressed as follows:—"I believe in one God, in whom is the Divine Trinity, who is a Being of infinite love, wisdom, and power, my Creator, Redeemer and Regenerator; and that this God is the Lord and Saviour Jesus Christ, who is Jehovah in a glorified human form. I believe in the Sacred Scriptures, as being the Word of God, or the Divine Truth itself, which is the fountain of wisdom to angels and men, and is able to make me wise unto salvation. I believe that if I would be saved, I must shun all evils as sins against God, and live a life

according to the Ten Commandments. I believe that when I die as to my natural body, I shall rise again in my spiritual body, and shall be judged according to my works, and that if I am good I shall go to heaven and become an angel, and be happy for ever; but if I am wicked I shall go to hell and become an infernal spirit, and be miserable for ever. I believe that now is the time of the second coming of the Lord, and of the commencement of the New Church called the New Jerusalem."

Newmarket Meetings. See RACING.

New Ministry of 1886, The British.

The Cabinet.

First Lord of the Treasury, and Keeper of the Privy Seal . . .	Mr. Gladstone.
Lord Chancellor . . .	Lord Herschell.
President of the Council	Earl Spencer.
Chancellor of the Exchequer . . .	Sir William Harcourt.
Home Secretary . . .	Mr. Childers.
Foreign Secretary . . .	Earl of Rosebery.
Colonial Secretary . . .	Earl Granville.
Secretary for War . . .	Mr. Campbell-Bannerman.
Indian Secretary . . .	Earl of Kimberley.
First Lord of the Admiralty . . .	Marquis of Ripon.
Secretary for Scotland	Earl of Dalhousie.
President of the Board of Trade . . .	Mr. Mundella.
President of the Local Government Board . . .	Mr. J. Stansfeld.
Chief Secretary for Ireland . . .	Mr. John Morley.

Not in the Cabinet.

Postmaster-General . . .	Lord Wolverton.
Chancellor of the Duchy of Lancaster and Vice-President of the Committee of Council on Agriculture . . .	Mr. E. Heneage.
Vice-President of the Committee of Council on Education . . .	Sir Lyon Playfair.
First Commissioner of Works . . .	Earl of Morley.
Junior Lords of the Treasury . . .	Mr. Cyril Flower, Mr. George Leveson-Gower, and Sir E. J. Reed.
Financial Secretary to the Treasury . . .	Mr. H. Fowler.
Patronage Secretary to the Treasury . . .	Mr. Arnold Morley.
Civil Lord of the Admiralty . . .	Mr. R. W. Duff.
Naval Lords of the Admiralty . . .	Admiral Lord J. Hay, K.C.B.; Vice-Admiral Sir A. H. Hoskins, K.C.B.; Vice-Admiral W. Graham, C.B., and Rear-Admiral J. E. Erskine.
Secretary to the Admiralty . . .	Mr. J. T. Hibbert.
Under-Secretary, Home Office . . .	Mr. Broadhurst.
Under-Secretary, Foreign Office . . .	Mr. J. Bryce.
Under-Secretary, Colonial Office . . .	Mr. Osborne Morga

Under-Secretary, India Office . . .	Sir U. Kay-Shuttleworth.
Under-Secretary for War . . .	Lord Sandhurst.
Surveyor-General of Ordnance . . .	Mr. W. Woodall.
Financial Secretary, War Office . . .	Mr. Herbert Gladstone.
Secretary, Board of Trade . . .	Mr. C. T. D. Acland.
Secretary, Local Government Board . . .	Vacant.
Attorney-General . . .	Sir Charles Russell, Q.C.
Solicitor-General . . .	Sir Horace Davey, Q.C.
Judge Advocate-General . . .	Mr. J. W. Mellor, Q.C.
Paymaster-General . . .	Lord Thurlow.
Lord Advocate . . .	Mr. J. B. Balfour.
Solicitor-General for Scotland . . .	Mr. A. Asher.
Lord-Lieutenant of Ireland . . .	Earl of Aberdeen.
Lord-Chancellor of Ireland . . .	Lord Justice Naish.
Attorney-General for Ireland . . .	Mr. S. Walker, Q.C.
Solicitor-General for Ireland . . .	The Macdermott, Q.C.

Household Appointments.

Lord Steward . . .	Earl Sydney.
Lord Chamberlain . . .	Earl of Kenmare.
Master of the Horse . . .	Earl of Cork.
Captain of Gentlemen-at-Arms . . .	Lord Sudeley.
Captain of Yeomen of the Guard . . .	Lord Monson.
Master of the Buckhounds . . .	Lord Suffield.
Treasurer of the Household . . .	Earl Elgin.
Vice-Chamberlain of the Household . . .	Viscount Kilcourse, M.P.
Lords in Waiting . . .	Lord Methuen, Lord Camoys, Lord Houghton, Lord Kensington, and Lord Hothfield.
Comptroller of the Household . . .	Hon. E. Marjoribanks.
Groom-in-Waiting . . .	Hon. C. R. Spencer.
Mistress of the Robes . . .	Still vacant.

Newman, His Eminence Cardinal John Henry, was b. in London 1801. Educated at Trin. Coll., Oxford, where he graduated with classical honours (1820), and was elected Fellow of Oriel Coll. Vice-Principal of St. Alban Hall (1825) under Dr. (afterwards Archbishop) J. Whately. Incumbent of St. Mary's, Oxford, and chaplain of Littlemore (1828-43). By his preaching he acquired great influence, and became, together with Dr. Pusey, one of the recognised heads of the "High Church" party, founded at Littlemore. Contributed to the "Tracts for the Times" and took a leading part in their publication, bringing upon himself the censure of the University authorities for the doctrines propagated. Seceded from the Established Church (1845) to that of Rome, and was appointed head of the Oratory of St. Philip Neri at Birmingham. Rector of the new Roman Catholic University of Dublin

(1854-58); afterwards principal of a Roman Catholic school at Edgbaston. Elected Honorary Fellow of Trinity Coll., Oxford (1877). Was created a Cardinal (1879) by Pope Leo XIII. Has written several remarkable works sustaining the doctrines of the Church of Rome, and particularly a reply to Mr. Gladstone's pamphlet on the Vatican decrees (1875)—"Apologia pro Vita Sua," etc. Cardinal Newman is one of the most learned and remarkable members of the Roman hierarchy at the present day.

Newnes, Mr. George, M.P., of West Hill, Putney, was b. at Matlock Bath, 1851. Educated at Silcoates Hall, Wakefield, and the City of London School. Is the proprietor of various serial publications. Mr. Newnes was returned in the Liberal interest for East Cambridgeshire (1885).

New Process. See FIRE AND LIFE INSURANCE.

Newspapers. The earliest *bonâ-fide* newspaper was the *Gazetta di Genova*, published early in the seventeenth century. The earliest English newspaper was *The Public Intelligencer*, established in 1663; the earliest Irish *The Dublin News-Letter*, 1685. The newspaper duty—originally 1*d.*, but gradually raised to 4*d.* (1815)—was reduced to 1*d.* again in 1836, and in 1855 abolished, the stamp being retained for postal purposes only. This also was annulled in 1870, when the 4*d.* book-post was introduced. The total number of newspapers at present published all over the world has been estimated at 35,892—*i.e.*, at about one journal for every 40,000th man. Appended are the details, in round numbers. The figures in parentheses are those of the daily papers:—

EUROPE	19,492
Germany (800)	5,500
France (360)	4,092
Great Britain (800)	4,000
Italy (150)	1,400
Austria-Hungary (150)	1,200
Spain	850
Russia (several in three languages)	800
Greece	600
Switzerland	450
Holland	300
Belgium	300
UNITED STATES (1,000)	12,500
ASIA	3,000
Japan	2,000
Others	1,000
AUSTRALIA	700
AFRICA	200
Egypt	30
Others (belonging to England and France)	170
	<hr/>
	35,892
Of these there are:—	
In English language	16,500
„ German „	7,800
„ French „	6,850
„ Spanish „	1,600
„ Italian „	1,450
„ other languages	1,692
	<hr/>
	35,892

News Agencies, which were practically unknown before 1868, have now become indispensable to the proper working of the newspaper press of this country. The abolition of the stamp duty made the penny journal possible; the development of the electric telegraph gradually encroached on the practical monopoly which the great London journals had possessed in the collection of news. Previous to 1868, the telegraph companies had established a system for the distribution of news to the newspapers of the United Kingdom; but in process of time it came to be regarded by enterprising newspaper proprietors as insufficient and unsatisfactory. Yet it was impossible for them to give it up, because of the enormous expense it would have entailed; and a threat from the Company to cut off the news-supply from an Irish journal had probably something to do with accelerating the movement which had been on foot for some years in favour of the **purchase of the telegraph system by the State.** This purchase was finally sanctioned by parliament in 1868. In the Act then passed provisions were introduced to give the press important advantages in the cheap transmission of news; and provincial newspaper proprietors at once formed themselves into a company for its collection and distribution. This company still exists in the **Press Association**, which has its headquarters in London, and connections in every town of any consequence in the United Kingdom. It is managed by a body of directors, composed of newspaper proprietors. It has a manager, editor, sub-editors, and a large staff of reporters, for the collection, condensation, and distribution of news. It has a network of correspondents spread over the country; so that, on events of importance occurring even in obscure villages, the details are quickly transmitted to the head-office in London, and thence retransmitted, after being carefully edited, to clients all over the kingdom. Thus, in regard to news, the press of the United Kingdom has been put upon a practical equality. The least prosperous journal, if it look carefully to the record of events in its own locality, may safely trust to the news agencies for the supply of all general matter. The London and leading provincial journals do not trust entirely to those agencies; they have their own correspondents and special sources of information. As regards foreign news, indeed, the London journals may still be said to have a virtual monopoly. These have all—notably the *Times*, *Standard*, *Daily Telegraph*, *Daily News*, *Daily Chronicle*, *Morning Advertiser* and *Morning Post*—correspondents in the principal European capitals, in India, in America, in China, and the Colonies, who promptly telegraph whatever of moment is occurring in their neighbourhood. Another system, developed by the transfer of the telegraphs to the Post Office, has been the "special wire," by which provincial papers have the exclusive command from six o'clock at night until six in the morning of a telegraph wire carried from their London office to the office in Liverpool, Manchester, Leeds, or Edinburgh, as the case may be. Thus they may transmit special accounts of important events or parliamentary reports, for which other newspapers have to depend upon the Press Association. Not that the Press Association has had, or has, the

field to itself. There is the **Central Press**, which was also formed in 1868 by **Mr. W. Saunders, M.P.**, who subsequently disposed of it to a company, which, it was understood, was to work it as a kind of political agency for the transmission of Conservative information. Mr. Saunders next started the **Central News Agency**, since converted into a limited company, which, next to the Press Association, is the most important of these agencies. Its system of management and working is precisely similar to that of the elder Association; but within the last few years the Central News has originated a foreign supply—which, however, may be said to be only in course of development as yet. Besides these, there is the **National Press Agency**, whose system is somewhat different from the others mentioned. It has a large printing establishment in London, and has become conspicuous in recent years by the publication of leaflets and pamphlets enforcing the views of Liberal politicians. It was at the establishment of the National Press Agency that Mr. Gladstone's address to the electors of Midlothian (*q.v.*) previous to the general election of 1885 was printed. This agency assists, for the most part, weekly and bi-weekly journals. It has columns of news, or a "London letter" if desired, on any matter of general interest stereotyped; and these column blocks are sent to any part of the United Kingdom, ready for immediate use in the newspaper. To the journals which use it, it saves composition as well as sub-editing, and a great many of the smaller newspapers of the kingdom avail themselves of its advantages. Another very important agent in the collection and distribution of news is **Reuter's Telegram Company**, dealing exclusively with foreign intelligence. It was in 1849 that **Baron Reuter** first made the attempt to start such an agency in this country. At the outset, however, the London newspapers declined to accept his news; and he confined himself merely to financial items of intelligence, until, in 1859, he had the good fortune to be the first to communicate to the newspapers here a report of the famous speech delivered by Napoleon III. to the Austrian ambassador at the New Year's reception at the Tuileries in that year—a speech which formed the immediate prelude to the Italian war. After this Reuter's telegrams grew more numerous in the newspapers. They were gradually extended from London to other parts of the United Kingdom; and now form the chief source of the foreign news supply for all provincial papers. The Press Association has an arrangement for the exclusive distribution of these telegrams to its clients in the provinces. Reuter's agency, converted into a limited company in 1864, has a vast number of correspondents scattered over Europe, India, America, and the colonies. There is scarcely a day on which these do not send to the head-office in London probably two or three columns of telegraphic news, which is immediately edited and sent out practically to every newspaper in Great Britain. Like the leading London journals, when war breaks out anywhere Reuter's Company procure special correspondents, and on important occasions send out wonderfully true and vivid accounts of battles as they occur. A younger agency than either of those referred to is the **Exchange Company**, started about eleven years ago, originally for the supply of Stock Exchange

quotations, by means of the **tape machine**, but now extended to the supply of general news, sporting, and parliamentary intelligence. Its machines will be found in a great many newspaper offices, in clubs, and even in private houses. When any piece of intelligence reaches the central office in London, it is at once "put on the tape," and is communicated simultaneously to every customer connected with the system. It has been found especially useful to newspapers in sporting matters—the results of races being sent in a marvellously rapid manner. The Company have central offices in Liverpool, Manchester, and some other large towns, which, in like manner, supply clients within a certain radius. They have also recently commenced a supply of foreign telegrams; but only as yet to a limited extent.

New South Wales. The oldest of the British colonies in Australia. Was founded as a penal settlement in 1788. Originally embraced half the continent. Since 1859 it extends from lat. 28° 10' to lat. 37° 28' S. It has Queensland on the north, and Victoria on the south. From the sea upon the east it stretches to long. 141° E., which meridian divides it from South Australia. Greatest length 900 miles; greatest breadth 850 miles; total area 323,437 sq. miles. Pop. 221,268. Convict immigration ceased in 1840. The colony received a constitution and representative government in 1843, and responsible government in 1855. Legislative power is vested in a Parliament of two houses. The upper, or Legislative Council, consists at present of 58 members (not to be less than 21) appointed by the Governor for life. The lower house, or Legislative Assembly, is composed of 121 members, elected triennially by 72 constituencies on a basis of manhood suffrage. The Ministry is responsible to the Legislative Assembly. Gold was discovered in 1851, and produced an immense rush from England and elsewhere to Australia. The first railway was opened in 1855, and telegraph to Melbourne opened 1858. Since 1872 there has been marked progress, free trade introduced, great extension of railways, etc. **Sydney Exhibition** held in 1879. Towards the close of 1883 the first **Intercolonial Conference** was held at Sydney, called together principally by the feeling aroused throughout Australia in consequence of Imperial Government disallowing annexation of New Guinea. Federation schemes discussed. In 1885 Imperial Parliament passed **Act** to allow **Australian Federation**, but New South Wales now holds aloof from the scheme proposed. In 1884-5 the colony, amidst immense enthusiasm, raised, equipped, and sent a contingent of soldiers to the Sudan—being the first occasion on which colonial troops have served with a British army abroad. New South Wales is divided into districts and counties. Of the latter there are 118; but only 20, which occupy the earlier settled territories near the coast, have much individuality. The remainder are part of the 13 pastoral districts. Of these districts, which are extensive regions, Murrumbidgee, Lachlan, Wellington, Bligh and Darling are good grazing lands; Liverpool Plains, New England, Macleay, and Clarence are suitable for agriculture; Monaro is a high and rugged table-land; Gwydir and Albert are both pastoral and agricultural; Warrego partly barren. The capital is **Sydney**, on Port Jackson; pop. 267,194. It is a splendid city, and is

the oldest, and still the most important, in all Australasia. Among other great public institutions of Sydney may be mentioned the Royal Mint, University, Free Library, National Gallery, and Observatory. Besides the metropolis are 46 boroughs and 43 municipalities. Leading large towns are Albury, Bathurst, Deniliquin, Goulburn, Grafton, Hay, Maitland, Newcastle, Parramatta, Tamworth, Wagga-Wagga, Wollongong, and Yass. There are about 1,800 miles of railway open, including the line which connects with the Victorian system at Albury, and there are 18,600 miles of telegraph wire. The revenue is £7,117,592; debt, £24,601,959; exports, £18,251,566; imports, £22,826,985; tonnage of vessels entered (1883), 10,886,859 tons. The country may be divided into three sections: coast district, from 30 to 120 miles wide, between coast range and the sea, fertile, settled, well watered; table-lands, extending from coast range westward to long. 141° E., poor pastoral, suffer from drought; plains of interior, well watered and grassed, chief pastoral region. Dividing range makes two watersheds, east and west. Eastern rivers short: principal, Hawkesbury, Hunter, Shoalhaven, Clarence, Macleay, Richmond, Manning (100 to 300 miles). Western system includes Darling (1,160 miles), Lachlan (700 miles), Murrumbidgee (1,350 miles), Murray (1,120), and their affluents. Large areas are suitable for grain-growing, and almost all productions of temperate and semi-tropical countries can be successfully grown. Orange and lemon groves very prolific. Tobacco and vines do well. In 1882, 543,597 gallons of wine manufactured from 4,028 acres of vines. Country rich in agricultural produce and stock: 347,000 horses, 2,181,000 cattle, 33,000,000 sheep, 214,000 pigs. Staple export wool: between £7,000,000 and £8,000,000 worth exported annually. Gold, coal, silver, iron, copper, tin, antimony, kerosene, etc., mined. Gold returns about £500,000 annually. Since first opening of tin mines, in 1872, nearly £5,000,000 worth of tin have been returned. Diamonds found at Cudjergong and elsewhere. Increasing output of iron. Coal, raised to annual value £948,966, is now exported. Coal-fields very extensive. Oil-shale now worked, and kerosene to annual value £40,000 manufactured. There are 2,820 works and factories in the colony, employing 30,000 hands in the aggregate. Land under cultivation is stated at 733,582 acres. Land of best quality can be bought at £1 per acre, payable by instalments. Education under Government control. Public schools, grammar schools, and colleges of the university; fees very low. The colony possesses a small force of regular military, together with a volunteer force, naval brigades, etc. There are also some armoured vessels and torpedo boats for coast defence. The recent strain in our relations with Russia having given rise to vigorous defensive measures. (Useful works of reference, besides official publications, are Blair's "Cyclopædia of Australasia," Gordon and Gotch's "Australian Handbook for 1886," Lang's "New South Wales," Lyne's "Industries of New South Wales," Wallace's "Australasia," etc.)

New Stake. See RACING.

New Star in Andromeda. See ASTRONOMY.

"New Style." See CALENDAR.

New Zealand. A colony of the British empire, consisting of a group of islands in the South Pacific, about 1,500 miles E. by S. from

Australia. There are two large islands: North Island, or Ahinemau, 500 miles by 250, area 45,687 sq. miles; South Island, or Te Wahi Ponamu, 500 miles by 200, area 57,579 sq. miles; also Stewart Island, area 1,000 sq. miles; Chatham Islands and Auckland Islands at some distance E. and S., area 377 sq. miles. Main islands are separated by Cook Strait, on north shore of which is Wellington, the capital. Coast is much indented by bays and harbours, estuaries and firths. Chief rivers are N. Wairoa, Thames, Waikato, and Wanganui in North Island; Wairau, Buller, Grey, Waitaki, Taieri, Clutha, Mataura, and Waiau, in South Island; also many smaller streams. Surface rugged. Volcanoes and volcanic belt across centre of North Island. Alpine chain descends along west coast of South Island. Its eastern slopes are the great grazing region. Lakes numerous: Taupo in North, Wakatipu in South Island are largest. Famous "Hot Lakes" and geyser regions between Taupo and Bay of Plenty. Immense tracts of forest, containing splendid timber, notably kauri pine in the north. E. and S. of South Island much open grass. No native animals except dogs and rats, now nearly extinct. No reptiles but lizards. Deer, cattle, pigs, goats, etc., wild in some parts; rabbits a plague in the south. Native birds sufficiently numerous, including an extinct gigantic struthious family, of which three small species (apteryx) are still found. Turkeys, pheasants, etc., introduced and plentiful. Natural productions of most value are kauri timber and gum, phormium or native flax, coal, gold, iron, and other minerals. There are coal mines and gold fields in several parts. Seas contain various excellent food fish in vast abundance. Total area 104,643 sq. miles. European population 564,304; Maori about 44,000; Chinese about 5,000. Maori chiefs signed treaty of Waitangi in 1840, whereby New Zealand became a British possession and a Crown colony. Auckland was founded as the capital. Representative government was soon introduced. Between 1840 and 1850 settlements were formed at Wellington, Taranaki, Nelson, Otago, and Canterbury. These became provinces, with autonomous government under the general direction of central government at Auckland. Subsequently Hawke's Bay, Marlborough, Westland, and Southland, were added to the list of provinces. In these early days there were several small wars with different native tribes, at Wairau, Wanganui, round the Bay of Islands, and again in Taranaki. In 1852 the Colony received a constitution and responsible government. Maori wars 1855 to 1869. The central parts of North Island were the scene. Sundry Maori of various tribes drew together under a "prophet," and professed a new religion called Paimairiri. The Waikatos elected a Maori "king." These two sections waged a guerilla warfare with British. Finally they became disassociated. After 1869 the "kingites" remained peaceable, but isolated in their own districts, and the "prophet" and his followers withdrew to a village in Taranaki. The latter were eventually dispersed in 1881—about which time, too, the "king" gave up the policy of isolation, visited England, and is now much on a par with chiefs of other tribes, who have become a part of the general community. In 1865 the seat of government was removed to Wellington, and in 1873 the Public Works Policy was inaugurated. Large loans were now raised, and the

funds devoted to immigration, to the construction of harbours, railways, roads, etc. In 1876 came into force a very important measure. The provinces were then done away with, and their several governments abolished. All government was centralised at Wellington, and the colony newly mapped out into 63 counties, which are subdivided into municipalities, ridings, and road districts. These are the present divisions of the country. Government is carried on by a Governor, who is advised by a responsible Ministry. Of the two Houses of Parliament, the upper consists of 54 members nominated by the Governor for life, the Lower of 95 members elected triennially on a manhood suffrage. Maori representatives sit in both Houses. The chief cities are Wellington, pop. (including suburbs) 22,757; Dunedin, 42,802; Auckland, 39,966; Christchurch, 39,719. Other rising and important towns, mostly seaports, taken in order of size, are Nelson, Oamaru, Napier, Thames, Wanganui, Invercargill, Lyttelton, Timaru, New Plymouth, Hokitika, Greymouth, Masterton, and Blenheim. There are 1,522 miles of railway, which extent is being rapidly increased, as well as numerous roads, and water communication. Imports, £7,663,888; exports, £7,091,667—consisting of wool, grain, gold, kauri-gum, tallow, timber, rabbit skins, flax and cordage, leather, meat, etc. Manufacture is progressing well. There are over 200 daily, weekly, and monthly periodicals. Revenue, £3,707,488; expenditure, £4,101,318; debt, £32,860,982. The colony has made phenomenal progress since 1840. Its resources are immense, and still inadequately worked. The depression has affected the colony, but wages are very high and living very cheap. Native troubles are now at an end. The public debt, though large, is secured by the works carried out. Government lands are now reserved on a new leasehold system, instead of being sold as formerly; but plenty of land is to be had cheap, and farming is lucrative. Artificial values of land also provided against to some extent. Much useful information can be obtained from "The Official Handbook to New Zealand," Hector's "Handbook to New Zealand," Hay's "Brighter Britain," Wallace's "Australasia," etc. The climates of New Zealand are equable, very healthy, and generally of the warmer temperate zone. There is an abundant rainfall. All British plants may be raised to perfection in the fertile soil. For the English labouring class it is a veritable paradise.

New Zealand Meat Trade. See MEAT SUPPLY.

Nicaragua Canal Treaty. See ENGINEERING (NICARAGUA SHIP CANAL).

Nicol. See GEOLOGY.

Nicol's Prism. See POLARISCOPE.

Niddry, Baron. See HOPETOUN, EARL OF.

Nigra, Count Constantino, statesman and Italian ambassador to the Court of St. James, was b. at Castellemonite, 1827. Educated at the University of Turin. Took part in the struggle with Austria (1848), and was badly wounded in the battle of Rivoli. When Count Cavour went to the Congress of Paris, Count Nigra accompanied him as his secretary. When the negotiations for the war of 1859 against Austria were being conducted between Victor Emmanuel and Napoleon III., Nigra was busy in the service of his sovereign. He was secretary to the representatives of Italy at the Congress of

Zürich. From 1861 to 1876 he was Italian ambassador at Paris. Subsequently he filled the same post at St. Petersburg (1876-82). He was appointed Italian ambassador at the Court of St. James (1882).

Nihilism. The name given in western Europe to modern Russian revolutionists. The modern revolution movement, which is but the continuation of a long series of previous manifestations of a similar character, presents three periods, differing considerably, both from the exterior means employed and the aims of its adherents. The first period (1871-77) was signalled by the general rush of young people "among the peasants," with the view of carrying socialistic propaganda. It involved some thousands of young people of both sexes, and extended over thirty-eight provinces. Its essential features were the pacific nature of the means employed, limited exclusively to oral and literary propaganda,—the immediate and complete re-organisation of the country and of the State on a socialistic basis being the generally accepted aim of the movement. The most important event of this period was the many trials of the propagandists: that of the Dolgoushin group in 1874; of the fifty propagandists of the Moscow group in February 1877; that of 193 propagandists, in the great trial of Myshkin and comrades. The papers of the epoch which preached the same theories were, *The Forward*, edited by Mr. P. Lavroff, at London; *The Workman* and *The Commune*, edited at Geneva; and the pamphlets of Michel Bakunin. From 1877 a reaction against peaceful means is manifest among the Socialists. The Government having prosecuted and punished with extreme cruelty all attempts at peaceful Socialist propaganda, the Socialists began to use arms, either to defend themselves when the police came to arrest them, or to revenge the ill-treatment of their companions on the officials. This armed struggle of the revolutionists with the police, growing more fierce on both sides, ended with the attempt of Solovieff against Alexander II. (April 14th, 1879). This attempt was followed by a long series of fresh outrages. The most important are the Moscow railway explosion (December 1st, 1879); the Winter Palace explosion (February 5th, 1880); and the Catherine Channel explosion (March 13th, 1881), which caused the death of Alexander II. The extreme violence of means signalling this second period, was, however, accompanied by considerable moderation of aims. By worrying and unrelentlessly attacking the person of the autocrat the revolutionists hoped to destroy the lustre of the autocracy, and to induce the emperor, under the pressure of personal apprehension, to make liberal concessions. The demands of the terrorists were for a liberal constitution, which would allow all parties, the Socialists included, to express freely their opinions, and to gain adherents to their views. The party papers of this period were published no more in Switzerland, but in the capital of the empire itself, in clandestine printing offices; the most influential of them being *Zemlia ká Volia*, started in 1878, and substituted a year later by two organs, the *Naradnaia Volia*, the organ of the terrorist party, having more decided political aspirations, and the *Tcherny Peridiel*, the organ of the partisans of the Socialist propaganda. In the reign of Alexander III. no attempt against the Emperor has been made, and few against the officials. But the idea of a military insurrection, which

germinated at the close of Alexander II.'s reign, began to manifest a strong vitality. The revolutionary idea spread in the army. The number of officers arrested for political conspiracy during Alexander III.'s reign amounted to about 200, and among them were two lieutenant-colonels and numerous commanders of independent military detachments. The scope of the party advocating military insurrections is to overthrow the autocracy by an open, though unexpected attack, and to convene a popular representative assembly, elected by universal suffrage, to re-organise the State institutions, according to their electors' instructions. Of late a revival of the propagandist party is observable, their chief object being to spread Socialist propaganda among the workmen of the towns. They have their clandestine paper in Russian, *The Workman's Gazette*. There is also a Ruthenian Social-Radical party, which specially favours the idea of federalisation, and is distinguished by more pacific dispositions. The Polish Socialists, who are in close connection with the Russians, have two clandestine papers at Warsaw, *The Proletariat* and *The Solidarity*, and one organ, *The Class Struggle*, in Switzerland. Owing to the economical condition of their country, the Polish Socialists give more attention to industrial Socialism, whilst the Russians assign the first place to agrarian reforms. All these parties are called indiscriminately "Nihilist" in Europe, but in Russia they have each their respective title. The term "Nihilism" is due to the Russian novelist Ivan Tourgheneff, who used it for one of his heroes—a partisan of scientific scepticism and æsthetical agnosticism—in his novel "Fathers and Sons."

Nilsson, Madame Christina. One of the greatest operatic singers of the present day, b. near Vexio, in Sweden, in 1843. At first she travelled about the country playing and singing at fairs, when M. Tornérhjelm, accidentally hearing her, made her his *protégée*, placing her under the care of Mr. Franz Berwald, of Stockholm, MM. Masset and Wurteh, at Paris, for her musical education. She made her first appearance, which was very successful, at the Théâtre Lyrique, Paris, in the part of Violetta in "Traviata." She visited London in 1867, and the United States in 1870. She again visited London, and sang in Drury Lane. In 1883-4 she made a brilliantly successful tour in the United States. In 1872 she married M. Auguste Ronzond, who died in 1882.

Nimbus Clouds. See METEOROLGY.

"Nineteenth Century Review" (2s. 6d. monthly). First number issued March 1877. Editor, **James Knowles, Esq.** (1877). Deals with the leading social, scientific, literary, and political questions of the day. The writers are among the foremost men of the time. Mr. Gladstone, Cardinal Manning, and Professor Huxley are among the contributors.

Nineveh. See ASSYRIOLOGY.

Nippold, Dr. See OLD CATHOLICS.

Nisi prius. Formerly all common law actions were tried at bar—that is, before the full court, consisting of several judges; and therefore the writ for summoning the jury commanded the sheriff to bring the jurors from the county where the cause of action arose to the Court at Westminster. But when the statute 13 Edw. I. directed the justices of assize to try issues in the county where they arose, the sheriff was thenceforward commanded to bring the jurors

to Westminster on a certain day, "unless before that day" (*nisi prius*) the justices of assize came into the county. At the present day any action tried by a jury before a single judge, whether in London and Middlesex, or at the assizes, is said to be tried at *nisi prius*. (See Sweet's "Law Dictionary.")

Nitrogenous Manures. See MANURES.

Nitroglycerine. See DYNAMITE.

Nobel. See DYNAMITE.

Nobel, Mr. Ernest, M.P. second son of the Hon. and Rev. Baptist Noel, was b. 1821. Educated at Trin. Coll., Cambridge. He is Deputy Lieutenant and J.P. for Sussex. Returned in the Liberal interest as member for Dumfries Burghs (1874-85); re-elected 1885.

Nolan, Colonel John Philip, M.P., R.A., was b. 1838. Educated at Trin. Coll., Dublin, and the Royal Military Academy, Woolwich. Belonged to the Royal Artillery (1857-81); served in the Abyssinian campaign. He is a J.P. for co. Galway. Returned as a Nationalist for Galway (1874-85); re-elected, for North Galway 1885.

Nolan, Mr. Joseph, M.P. Formerly engaged in the scholastic profession. Manager of the Aquarium and Casino, New Brighton. Returned as a Nationalist for North Louth (1885).

Nolle prosequi, means an acknowledgment or undertaking entered on record by the plaintiff in an action, to forbear to proceed in the action either wholly or partially. (See Sweet's Law Dictionary.)

Noms de Plume of some principal modern writers, etc. :—

[* implies only occasional or early anonymity.]

<i>A.L.O.E. (= A Lady of England)</i>	Charlotte Maria Tucker.
<i>Adeler, Max</i>	Chas. Heber Clark.
<i>*Ally Sloper</i>	Chas. H. Ross.
<i>Amateur Casual, An</i>	Jas. Greenwood.
<i>Anstey, F.</i>	F. Anstey Guthrie.
<i>Ape ("Vanity Fair")</i>	Pellegrini(caricaturist).
<i>Auber Forrester</i>	Albertine Woodward.
<i>*Augustsohn</i>	W. von Kotzebue.
<i>*Aunt Hester</i>	Miss G. M. Craik.
<i>"Judy</i>	Mrs. Alfred Gatty.
<i>"Kitty</i>	Maria Macintosh.
<i>"Louisa</i>	Mrs. Valentine.
<i>Atlas</i>	Edmund Yates.
<i>*Bab</i>	W. S. Gilbert.
<i>"B"</i>	Lord Bramwell.
<i>*Baptistet</i>	Alphonse Daudet.
<i>Bede, Cuthbert</i>	Edw. Bradley.
<i>Bee-Master</i>	Dr. Cumming.
<i>Bell, Acton</i>	Anne Brontë.
<i>"Currer</i>	Charlotte Nichols, <i>nee</i> Brontë.
<i>"Ellis</i>	Emily Brontë.
<i>*Berwick, Mary</i>	Adel. Anne Procter.
<i>Bibliophile Jacob</i>	Paul Lacroix.
<i>*Biddle, Jasper</i>	Albert Smith.
<i>*Biglow, Hosea</i>	J. Russell Lowell.
<i>Billings, Josh</i>	Henry G. Shaw.
<i>*Binet, Satani</i>	Francique Sarcey.
<i>*Bon Gaultier</i>	Sir Theod. Martin.
<i>*Bos</i>	Chas. Dickens.
<i>Braddon, Miss</i>	now Mrs. Maxwell.
<i>Breitmann, Hans</i>	Chas. Leland.
<i>Bret Harte</i>	Francis Bret Harte.
<i>*Brooke, Nelsie</i>	Mrs. E. Ross.
<i>*Brown, Tom</i>	Thos. Hughes.
<i>*Brownrigg, Henry</i>	Douglas Jerrold.
<i>*Caliban</i>	Robt. Buchanan.
<i>*Carle</i>	Victorien Sardou.

- Carmen, Sylva* . . . Queen of Roumania.
Caveat Emptor . . . Sir Geo. Stephen.
**Caxton, Pisistratus* . . . Bulwer Lytton.
**Cecil, Davenant* . . . Rev. Derwent Cole-
**Cecil Power* . . . Grant Allen. [ridge.
**Champfleury* . . . Jules Fleury.
**Charlist Parson, A* . . . Chas. Kingsley.
**Coffin, Joshua* . . . H. W. Longfellow.
Conway, Hugh . . . J. B. Fargus.
Cornwall, Barry . . . B. W. Procter.
**Colton, R. J.* . . . Mortimer Collins.
Crawley, Capt. . . . G. F. Pardon.
Crayon, Christopher . . . J. E. Ritchie.
**Crowfield, Christopher* . . . Mrs. Beecher Stowe.
Crowquill, Alfred . . . A. H. Forrester (artist).
**Cruiser, Benedict* . . . G. A. Sala.
Dagonet . . . G. R. Sims.
**Dalmocand* . . . Geo. Macdonald.
Danbury Newsman,
The . . . J. M. Bailey.
**Delorme, Joseph* . . . C. A. Sainte-Beuve.
Della (Δ) . . . D. M. Moir.
Dioscorides . . . Prof. P. Harting.
**Dorn, Justus* . . . W. Müller v. Königs-
 winter.
**Druid* . . . H. H. Dixon.
Eliot, George . . . Mrs. Cross (née Evans).
**Etonensis* . . . Rt. Hon. W. E. Glad-
 stone.
Everitt Graham . . . — Richardson.
Expertus . . . Rev. Malcolm MacColl.
**Farleigh, Frank* . . . Frank Smedley.
Fane, Violet . . . Mrs. Singleton.
"Farthing Poet" . . . R. H. Horne, because he
 pub. the first edition of
 his "Orion" at 1d., as
 a satire on the non-
 buying poetical public.
- Farningham, Mari-*
anne . . . Miss Hearn.
Fern, Fanny . . . Sarah Parton.
**Fin Bec* . . . W. Blanchard Jerrold.
**Fitsboodle, G.* . . . W. M. Thackeray.
**Flaneur* . . . Edmund Yates.
**Forrest, George* . . . Rev. J. G. Wood.
Forrester, Frank . . . H. W. Herbert.
**Froissari, Jean* . . . Alphonse Daudet.
G. A. S. ("Illust.
London News") . . . G. A. Sala.
**Gaston, Marie* . . . Alphonse Daudet.
**Gosebel, Paul* . . . Chas. Lever.
Greenwood, Grace . . . Sarah Lippincott (née
 Clarke).
**Grimbosh, H.* . . . C. Mackay.
Gushington, Angelina . . . C. W. R. Cooke.
Harkaway . . . H. Marshall.
Harte, Bret . . . Francis Bret Harte.
Hazard, Désiré . . . Octave Feuillet.
Heiter, Amalie . . . Duchess of Saxony.
Henry, Camille . . . Countess De la Rocca.
Hiever, Harry . . . Chas. Brendley.
Hope, Ascoli R. . . . R. Hope Moncrieff.]
Holspur . . . Henry Buck.
Hyacinthe, Père . . . Chas. Loyson.
Iconoclast . . . Chas. Bradlaugh.
Idstone . . . Rev. Thomas Pearce.
Ingoldsby . . . Rev. R. Barham.
Ignatius, Father . . . Rev. J. Leycester Lyne.
Irving, Henry . . . J. H. Brodribb.
Jacob, Bibliophile . . . Paul Lacroix.
**Jacques* . . . J. Hain Friswell.
**Jones, T. Percy* . . . Prof. Aytoun.
Jorrock, John . . . E. Surtees.
Keene, Chas.,
("Punch") . . .
L., L. E. . . . Letitia E. Landon.
- *La Tour, Tomline* . . . W. S. Gilbert.
**Layman, A.* . . . Lord Houghton.
Lee, Holme . . . Harriet Parr.
Leith-Adams, Mrs. . . . now Mrs. De Courcy
 Laffan.
Leslie, Frank . . . Henry Carter.
Limner, Luke . . . Sir John Leighton
 (artist).
Lorrequer, Harry . . . Chas. Lever.
**Lot, Parson* . . . Chas. Kingsley.
**Mace Sloper* . . . C. G. Leland.
**Maitland, Thos.* . . . Rob. Buchanan.
**Manners, Mrs. Horace* . . . C. A. Swinburne.
Markham, Mrs. . . . Mrs. E. Penrose.
Marlitt, E. . . . Eugénie John.
Marryat, Florence . . . now Mrs. Lean.
Marvel, Ik. . . . Donald Mitchell.
Meredith, Owen . . . Lord Lytton.
Merlin ("Field") . . . Jas. Long.
**Minute Philosopher, A* . . . Chas. Kingsley.
**New Writer* . . . Lewis Morris.
North, Christopher . . . Prof. Wilson.
O'Doherty, Morgan . . . Dr. Maginn.
**O'Dowd, Cornelius* . . . Chas. Lever.
Old Shekarry . . . Major Leveson.
Olphar Hamst . . . Ralph Thomas (biblio-
 grapher).
Optic, Oliver . . . Wm. T. Adams.
Orpheus C. Kerr
(= Office Seeker) . . . R. H. Newell.
Ouida . . . Louise de la Ramée.
Page, H. A. . . . Alex. Japp.
Parley, Peter . . . Sam. A. Goodrich (also
 claimed by several
 others).
**Pastel* . . . G. F. Pardon.
**Pendennis, Arthur* . . . W. M. Thackeray.
Pendragon . . . Henry Sampson.
**Periwinkle, Paul* . . . Percy B. St. John.
**Pfaal, Hans* . . . E. A. Poe.
**Philomneste* . . . Gustave Brunet (biblio-
 grapher).
Phis. . . . Hablot K. Browne
 (artist).
**Phusin, Kate* . . . John Ruskin.
**Pindar, Paul* . . . J. Yonge Akerman.
**Plymley, Peter* . . . Sydney Smith.
**Prendergast, Paul* . . . Douglas Jerrold.
Prout, Father . . . F. S. Mahony.
Puck . . . John Proctor.
**Querry, Peter* . . . Martin F. Tupper.
**Quirinus* . . . Dr. J. von Dollinger
 (Old Cath.).
**Ramsbottom, Mrs.* . . . Theodore Hook.
Red Spinner . . . Wm. Senior.
Rob Roy . . . John MacGregor.
**Roving Englishman* . . . E. C. Grenville-Murray.
**Runnymede ("Times")* . . . Lord Beaconsfield.
San Marte . . . Albert Schulz.
Scrutator . . . Rev. Malcolm MacColl.
Seache, John . . . Archbishop Whately.
**Shirley* . . . John Skelton.
Sketchley, Arthur . . . George Rose.
Slick, Sam . . . T. C. Halliburton.
**Slingsby, Lawrence* . . . G. H. Lewes.
Smiff, Philander . . . A. A. Dowty.
**Solomons, Ike, jun.* . . . W. M. Thackeray.
**South, Simeon* . . . J. Macgregor.
**Sparks, Godfrey* . . . Chas. Dickens.
Slepniak . . . said to be Prof. Drago-
 manov, of Kiev.
Sterne, Carus . . . Ernst Krause.
Stonehenge . . . J. Walsh.
**Stonemason, A.* . . . Hugh Miller.
**Summerly, Felix* . . . Sir Henry Cole.
**Sultières, S. de* . . . Francique Sarcey.

- Syntax, Dr.* Wm. Combe.
Taylor, G. (in "Antinous") . . . J. A. Crowe.
Temple, Neville . . . Julian Fane.
Tilmarsh, Michael Angelo W. M. Thackeray.
Touchstone M. Booth.
**Trafford, F. G.* . . . Mrs. Riddell.
**Trevor, Edward* . . . Lord Lytton.
**Trois Etoiles (* *)* . . E. C. Grenville-Murray.
Trusta, H. . . . Elizabeth Phelps.
**Town Critic Junior* . . Leigh Hunt.
Twain, Mark . . . Samuel L. Clemens.
Two Brothers ("Guesses at Truth") J. and A. Hare.
Two Brothers ("Poems") . . . A. and C. Tennyson.
Ubique Parker Gillmore.
Uncle Hardy Wm. Senior.
Valbert, G. . . . Victor Cherbuliez.
**Vainberg (Edinb. Jl.)* . . Sir W. Scott.
Wagstaffe, Launcelot . . C. Mackay.
Wanderer E. H. d'Avigdor.
Ward, Artemus . . . Chas. F. Browne.
**Welby, Horace* . . . John Timbs.
**White, Babington* . . Miss Braddon (*q.v.*).
**Whitefeather, Bradbas* . . Douglas Jerrold.
Worboise, Emma J. . . Mrs. Guyton.
Yendis, Sidney . . . Sydnev Dobell.
**Yorke, Oliver* . . . F. S. Mahony.
Zadkiel Lieut. R. F. Morrison.
**Zeta* J. Anthony Froude.
Zeta ("Graphic") . . John Lovell.

Nonfruct. A term derived from the civil law, and having no precise equivalent in English legal terminology. It is defined in the "Institutes" as the right of using and enjoying the property of another without detriment to its substance. Nonfruct, in Roman law, was a life interest, and may be compared to an estate for life in the English law of real property. But there might in Roman law be nonfruct of other things than land—*e.g.*, of a flock or herd; indeed, of all things except those which, like provisions, are necessarily consumed in the use. From the Roman law the term and that which it denotes have passed into all derivative codes.

Nordenfeldt Submarine Boat is a cigar-shaped torpedo vessel, invented by **Mr. Nordenfeldt**, which by means of vertical propellers is forced under water, and while thus submerged can be driven at the rate of three miles an hour. This boat, whose trials were witnessed by the Prince of Wales during his visit to Norway in 1885, was built in 1883, and is likely, if it reaches the expectations of its inventor, to entirely revolutionise the present system of naval warfare, as no present method of defence can resist its operations. As an instance of the interest manifested in this submarine boat by the European powers, as well as Japan and Brazil, thirty-nine representatives were sent to report on its trials.

Nordenfjöld, Professor. See ARCTIC EXPLORATION.

Norfolk, Henry Fitz-Alan Howard, 15th Duke of (creat. 1483; b. 1847; succeeded his father 1860. Is premier Duke and Earl, hereditary Earl Marshal and Chief Butler of England. The 1st Duke was attainted in 1485, as was also his son; he was, however, restored to the honours in 1489. The 3rd Duke was under attainder (1546 to 1553); his son was the Earl of Surrey executed by Henry VIII. The 4th

Duke was attainted and beheaded (1572), for his attachment to the cause of Mary, Queen of Scots.

Normanby, George Augustus Constantine Phipps, P.C., and Marq. of (creat. 1838; b. 1819; succeeded his father 1863. Was for some years Controller of the Queen's Household; Governor in turn of Nova Scotia, Queensland, New Zealand, and Victoria. This family was founded by Sir Constantine Phipps, Lord Chancellor of Ireland (1710 to 1714), whose grandson was the 1st Baron Mulgrave.

Normanton, James Charles Herbert Welbone Ellis-Agar, 3rd Earl of (creat. 1806); holds his seat in the House of Lords by title of Baron Somerton (1873); b. 1818. Was M.P. for Wilton (1841-52).

Norris, Mr. E. S., M.P., was b. 1832. He was educated privately. Connected for more than thirty years with the firm of Norris and Co., leather works, Shadwell. Is treasurer to the East London Hospital for Children and to the Merchant Seamen's Orphan Asylum. Returned in the Conservative interest as member for Limehouse Division, Tower Hamlets (1885).

"North, Christopher." See NOMS DE PLUME.
North Sea and Baltic Canal See ENGINEERING.

North, William Henry John, 11th Baron (creat. 1554); b. 1836; succeeded to the title on the death of his mother in 1884.

Northampton, William Compton, 4th Marq. of (creat. 1812); b. 1818; succeeded his brother 1877; was Envoy Extraordinary upon a special mission to the King of Spain (1881). Is descended from Sir William Compton, a distinguished courtier *temp.* Henry VIII.; the 2nd Earl was an active Royalist during the civil wars, as was likewise the 3rd Earl.

Northbourne, Walter Charles James, 1st Baron (creat. 1884); b. 1816; succeeded his grandfather in the baronetcy 1829. Was M.P. for Hull (1837-47).

Northbrook, Thomas George Baring, P.C., 1st Earl (creat. 1876), eldest son of the 1st Baron Northbrook; b. 1826; succeeded his father in the barony 1866; was a Lord of the Admiralty (May 1857 to March 1858); Under-Secretary for India (June 1859 to Jan. 1861), and Under-Secretary for War from the last date to June 1861, when he resumed the office of Under-Secretary for India, which he retained until April 1864; Under-Secretary for the Home Department from the last date to July 1866; became Viceroy of India in 1872; resigned Feb. 1876; was First Lord of the Admiralty (May 1880 to June 1885).

Northcote, Hon. Henry Stafford, C.B., M.P., the second son of the Earl of Iddesleigh (*q.v.*), was b. 1846. Educated at Eton and at Merton College, Oxford, where he graduated. Appointed a clerk in the Foreign Office (1868); was attached to the Marquis of Ripon's special mission to arrange the Alabama Treaty of 1871; secretary to Her Majesty's Claims Commission under the Treaty of Washington (1871-73); private secretary to the Marquis of Salisbury on his embassy to Constantinople (1876-77); acting third secretary in the Diplomatic Service (1876); private secretary to his father, the Chancellor of the Exchequer (1877); created C.B. (1880); Financial Secretary to the War Office (1885). Returned in the Conservative interest as member for Exeter (1880-85); re-elected 1885.

Northesk, George John Carnegie, 9th Earl of (creat. 1647); b. 1843; succeeded his father

1878; and was elected a representative peer for Scotland in 1885. The 7th Earl was a distinguished admiral, and was third in command at Trafalgar.

Northington, Baron. See HENLEY.

Northumberland, Algernon George Percy, P.C., 6th Duke of (creat. 1766), b. 1810; succeeded his father in 1867. Was a Lord of the Admiralty (March 1858); Vice-President of the Board of Trade (Feb. to June 1859); Lord Privy Seal (1878 to May 1880); is President of the Royal National Lifeboat Institution. The present peer is Sir Hugh Smithson's great-grandson through his second son, and thus is descended, by the female line, from the ancient house of Percy. The Duke of Northumberland of Charles II.'s time was that King's third natural son by the Duchess of Cleveland, and was created Duke of Northumberland four years after the death of Joceline Percy, 11th earl; his honours expired, however, in 1716, and the Percy line was revived.

Northwick, George Rushout, 3rd Baron (creat. 1797), b. 1811; succeeded his uncle 1859. Sat for East Worcestershire (1847-59). Is descended from Marshal de Jarnas, Grand Master of the Horse to Louis XI.

Norton, Charles Bowyer Adderley, P.C., 1st Baron (creat. 1878); b. 1814. Appointed President of the General Board of Health, and Vice-President of the Committee of Council on Education (March 1858); Under-Secretary for the Colonies (June 1866 to Dec. 1868); President of the Board of Trade (Feb. 1874 to 1878). M.P. for North Staffordshire (1841-78).

Norton, Mr. Robert, M.P., of Downs House, Yalding, Maidstone, was b. 1838. Called to the bar at the Middle Temple (1866), and was connected with the War Office. Has taken an active part in philanthropic movements in Kent. Returned in the Conservative interest as member for South-West Kent (1885).

Norwich, Hon. and Rt. Rev. John Thomas Pelham, 88th Bishop of (founded 1088), youngest son of the 2nd Earl of Chichester; b. 1811; consecrated Bishop of Norwich on the resignation of Dr. Hinds (1857).

Not Proven. A form of verdict in Scotch criminal trials which implies that, although the prisoner has not been proved to be guilty, yet neither has he been proved to be innocent. Its practical effect is the same as that of a verdict of "not guilty."

Nottage, George Swan, the late Lord Mayor of London, d. April 11th, 1885. He was b. 1823. Elected an Alderman (1875), and Sheriff (1877); Lord Mayor (1884). He was the founder of the London Stereoscopic and Photographic Company.

Nova Cygni. See ASTRONOMY.

Nova Scotia. See CANADA.

Novello's Oratorio Concerts. See MUSIC FOR 1885.

Nubar Pasha. Egyptian statesman, b. at Smyrna, January 1825, educated in Switzerland and France. His first appointment in the diplomatic service was that of secretary to Boghos Bey (1842). Later on he became Secretary Interpreter at the court of Ibrahim Pasha, whom he followed in his visits in Europe, and to Constantinople; afterwards he became attached in the same capacity to Abbas Pasha, who conferred upon him the title and rank of Bey. Owing to his negotiations when in London (1850), the rights of the Viceroy of Egypt were recognised by Turkey. Nubar Pasha was Egyptian Minister to Vienna (1854). In 1856 he became Attaché to the Viceroy Said Pasha, which post he retained on the latter's death, displaying administrative abilities of a very high order. On the accession to the throne of Ismail Pasha, he was intrusted with the regulations concerning the piercing of the Isthmus of Suez. Great credit is due to Nubar Pasha for the manner in which he acquitted himself of that delicate mission with the arbitrate co-operation of Napoleon III. (July 1864). His services were rewarded by the rank of Bey. After this he was sometime Minister of Public Works, and during his time of tenure public works were carried on on a large scale. In 1866 he became Minister for Foreign Affairs, and was sent on an extraordinary mission to the court of the Sultan, obtaining for his master the title of Khedive, the extension of his powers, and the consolidation of the autonomy of the Egyptian Government (June 1867). In 1867 Nubar Pasha represented Egypt at the Financial Conference of Paris. In 1878 he was head of the ministry in which England and France had for their representatives Sir Rivers Wilson and M. de Blignières. In 1879 Ismail was deposed, and Nubar left Egypt. In 1884, on the resignation of Chérif Pasha, he became again Prime Minister of Egypt.

Nyassa. A great lake in the south-east of Central Africa, 350 miles long, averaging 38 broad. Encircled by lofty mountains, rising 10,000 feet—**Livingstone Mountains.** Scotch settlement at **Livingstonia** on south. Steamer on lake. Settlers growing sugar and coffee. Smaller lake, **Shirwa**, isolated to south. Outlet the **Shire river** (q.v.), affluent of Zambesi. There are several British missions and trading settlements about these lakes. A road has been made from Nyassa to Tanganyika, where there is also a steamer; and another road is in process of construction from Nyassa to Dar-es-Salam, on the Suaheli coast. The blighting Portuguese influence is little felt here; and the gradual formation of a British colony, independent of any government, is a matter for serious reflection. (See BLANTYRE, ZAMBESI, etc.)

Oaks. See RACING.

Oath, Parliamentary. See HOUSE OF COMMONS.

Oberammergau is a village in Upper Bavaria, about twelve miles from Murnau (nearest railway station). It is celebrated for the performance, every ten years, of the modern "mystery" play of the Passion, Crucifixion and Ascension of Christ, first instituted in 1634, with the object of averting a pestilence, and kept up, with few interruptions, to the present time. In several other villages there are similar performances—e.g., at Brixlegg, near Innsbruck. The Oberammergau play was "discovered" in 1850 by the German actor Devrient, and since then has been visited by thousands, from Europe and America. The performance, which lasts eight hours, takes place every Sunday on a temporary wooden stage of huge dimensions, open to the sky, at the back of which a smaller covered stage is erected. The latter is primarily intended for the *tableaux*, representing typical scenes from the Old Testament history, which precede every act of the drama; the former is destined for the chorus (which introduces every act with an ode, after the manner of the Greek stage), and for the action of the play itself. The text of the Passion Play—elaborated by village talent during 250 years, but never published—adheres for the most part to Christian, as opposed to Roman Catholic, tradition, and is specially modelled on the Gospel according to St. John. Veronica, however, appears with her handkerchief; but no marvellous impression is left upon it. The details of the play are designed to aid the imagination rather than to reconstruct the sacred story by the addition of any new incidents. Many of the speeches introduced to meet the demands of dramatic necessity are very beautifully conceived, as when Mary Magdalen cries, "Mein Herz hängt mit Dir am Kreuze"; the debates in the Sanhedrim are far too long. But the general success of the actors is above all praise; and it would remain inexplicable how a small village of about 1,400 inhabitants, mainly wood carvers, have been able to do what no professional company in the world could achieve, were not the influence of the play itself, in educating and refining successive generations of performers, taken into account. Several hundred persons take part in the play, which is regarded in the light of a religious exercise. Before it commences, the actors assemble for prayer, and in 1876 Pope Pius IX. granted an indulgence of one hundred days to all visitors. Special praise is due to the acting of Joseph Meier, who in 1870 and 1880 played the principal part. The music is written by the aged village schoolmaster, Rochus Dedler. In 1880 the total expenses were £6,500, the total receipts £12,500; for thirty-nine performances Meier received only £50, and the other actors sums varying from £32 to £3 10s. Preparations for *Paschens-jahr* go on for several years previous. On the other hand, the play is indirectly profitable to the inhabitants in various ways.

Obispo. See PANAMA CANAL.

Obituary, 1885—Mar. 1886. See APPENDIX.

Obligation, Days of. See DAYS OF OBLIGATION.

O'Brien. See FENIANS.

O'Brien, Mr. J. F. X., M.P. A commission agent in Cork. Returned as a Nationalist for South Mayo (1885).

O'Brien, Mr. P. J., M.P., was returned as a Nationalist for North Tipperary (1885).

O'Brien, Mr. William, M.P., was b. 1852. Educated at Queen's Coll., Cork. He is editor of *United Ireland*. Returned as a Nationalist for Mallow (1883-85); South Tyrone (1885).

Obstruction, Parliamentary, as at present understood, is a comparatively modern feature in English politics. Opposition to particular measures or ministries has always prevailed, more or less, in the House of Commons; but the system of offering an organised resistance to all legislation or effectual administration, with the declared purpose of making government impossible, has developed itself only during the last decade. In the parliament of 1868 a small band of members, not numbering half a dozen, conceived the idea that the tendency of modern legislation was mischievous, and therefore took advantage of certain forms of the House, especially of the rule by which the sitting is closed when forty members are not present, to make the passing of bills through the House a matter of greater difficulty than it had previously been. Their efforts were not very successful, and caused no substantial harm. In the parliament of 1874, however, the example they had set was improved upon by a more determined section of members, and with a much more serious object. Among the Irish representatives who had been returned as supporters of Home Rule there were about a dozen of more advanced opinions than their compatriots. These, headed by **Mr. Parnell (q.v.)**, who had been defeated at the general election, but had subsequently been returned on the occurrence of a casual vacancy, broke away from the leadership of **Mr. Isaac Butt**, and resorted to expedients of their own, more pronounced than that gentleman was prepared to sanction, for forcing the Irish question on the attention of the House of Commons. Of these expedients the foremost was that of obstructing the progress of business generally, and of Irish coercive legislation in particular. To this end dilatory motions were constantly introduced, repeated divisions were taken on practically one and the same issue, speeches were multiplied and prolonged, and counts-out were very studiously planned. One of the most undisguised acts of obstruction was that of a well-known Irish nationalist, who delivered to empty benches a speech of about five hours' duration, made up of lengthy extracts from Blue Books. On the South Africa Bill, which authorised the annexation of the Transvaal, tactics of the same kind were pursued to an extent which rendered it necessary for the House to prolong its sittings all through the night, and to organise relays of members, with the view of physically exhausting the malcontents. This end was accomplished, but not without much scandal being caused. The general election of 1880 resulted in a considerable increase of the number of members prepared to support Mr. Par

nell's methods, the nature of which became more apparent at the commencement of the session of 1881. The Queen's Speech on that occasion intimated that Parliament would be asked to confer additional powers on the Irish Executive; and this led to a debate, mainly kept up by Mr. Parnell's followers, protracted over eleven days. On January 25th, in the same year, Mr. Forster moved for leave to bring in a Bill for the better protection of person and property in Ireland. This motion, usually treated as purely formal, was taken advantage of by the Irish members to raise a debate, which was eventually adjourned. On the following day Mr. Gladstone submitted a motion for giving precedence to the Bill over all other business, and the House was kept sitting for twenty-two hours continuously—from 4 p.m. on Tuesday till 2 p.m. on Wednesday—in order to secure the adoption of that resolution. On January 27th the adjourned motion for leave to introduce the Bill again came before the House; the debate upon it was kept up for two sittings, almost exclusively by the Parnellites; and as there seemed no likelihood of their voluntarily allowing the discussion to come to an end, the Government made arrangements for the House to sit continuously until the obstructors should be wearied out. Accordingly the House met at four o'clock on January 31st, and thereafter motions for the adjournment of the debate and for the adjournment of the House were, with other dilatory tactics, persistently resorted to by the Parnellites. The sitting was prolonged all through the night of January 31st, and the following day, and until nine o'clock on the morning of February 2nd. At that hour the resistance to the motion was still being angrily sustained, when Mr. Speaker Brand, amid great excitement, announced that he should take upon himself to put an end to the debate. This he at once did, notwithstanding vehement protests from the Irish members. At the same time, the occupant of the chair pointed out that the dignity, credit, and authority of the House were seriously threatened, and that it was necessary that they should be vindicated. Acting upon this intimation, Mr. Gladstone at the next sitting brought forward a resolution for enlarging the powers of the Speaker, by giving him absolute control, whenever the House should decide by a majority of not less than three to one, that the state of public business was urgent. This was strenuously opposed by the Parnellites; and very disorderly scenes took place, which eventuated in the suspension (under a rule passed in 1880) of Mr. Parnell and all his followers. They having been thus temporarily reduced to silence, Mr. Gladstone's proposal was adopted, and under it the Speaker framed a series of regulations for the conduct of business, some of which were subsequently proved to be very effectual, but as they could only operate when the House, by a majority of three to one, voted urgency, they had no value; as against general obstructive tactics, which the Parnellites continued to pursue with so much success as to provoke general demands for a revision of the rules of procedure. Accordingly, some negotiations took place between the Government of the day and the leaders of the Opposition, with the view of arriving at an agreement as to what alterations should be made; but the attempt thus to arrange matters failed, owing to the insistence of Mr. Gladstone on his proposal for giving the power

of closure to a bare majority, the Conservatives contending that there should be required for such purpose a majority of two-thirds. Parliament was assembled in October 1882 for the special purpose of considering the matter. After a protracted debate the closure resolution was agreed to by 304 votes to 260, but it was weighted with restrictions calculated to interfere with its general application. As a matter of fact, during the three years of its existence it has been put in force only once, but it may not improbably be found serviceable in future cases of great emergency. The other rules of procedure adopted on the same occasion have been more frequently used, and have had an observable effect, at all events, in checking the original forms of obstruction, and compelling the practisers of the art to discover new channels. We briefly state the nature of the Standing Orders adopted in 1882. If the Speaker be of opinion that it is the evident sense of the House that the question under discussion should be at once put, he must so state, whereupon a motion may be made "That the question be now put;" and if this be carried, the question is to be put accordingly; but not unless the proposal so to put it has been supported by more than 200 members, or "unless it shall have been opposed by less than 40 and supported by more than 100." Rule 3 provides that motions for adjournment before public business (which could formerly be brought forward by a single individual) shall not be permitted unless 40 members signify their approval. Rule 3 limits the debates on ordinary motions for adjournment to the matter of such motions. Rule 4 dispenses, in certain cases, with a formal division, where the minority is less than 20. Another enactment gives the Speaker discretionary power to silence any member who is indulging in continued irrelevance or tedious repetition. He is also empowered, when a motion for adjournment is made which appears to him to be an abuse of the rules of the House, to put such motion forthwith, without allowing any discussion upon it. By Rule 9 it is provided that, when the Speaker names a member for disregarding the authority of the chair, or for wilful obstruction, a motion for the suspension of such member may be put forthwith; and if carried, the member shall be suspended from the service of the House for one week; in the case of a second offence, for a fortnight; or of a third offence for one month. The privilege formerly enjoyed by members of discussing any topic whatever on the motion to go into Committee of Supply, is taken away, except in regard to certain specific occasions. There are minor provisions which need not be detailed. Those which we have described have undoubtedly, since their adoption, facilitated the progress of business, and would probably suffice, in ordinary circumstances, to prevent anything like effectual obstruction; but they have failed to entirely thwart the organised hostility of the large and ingenious body of politicians whose avowed desire is to make Parliamentary government impossible except at the price of the concession of their demands. Meanwhile, there is general concurrence in the idea that any further change in the standing orders in reference to obstruction must, if necessary to be made at all, take the form of increased initiative and controlling power to be vested in the chair. Mr. Gladstone and his colleagues have pledged themselves to bring forward proposals for the reform of

procedure; and the late Conservative ministers were also prepared, had they continued in office, to bring forward this question. See **PARLIAMENTARY PROCEDURE.**

Ockham, Visct. See **WENTWORTH.**

O'Connell, Morgan, second son of the "Liberator," d. Jan. 19th, 1885, at the age of 81. In early life he joined the Irish Legion, which served under General Descreux in Bolivia, and afterwards in the Austrian army. On his retirement from the House of Commons, in which he sat for an Irish constituency for twenty-five years, he was appointed Registrar of Deeds, with a salary of £1,200 a year.

O'Connor, Mr. Arthur, M.P., was b. 1844. Educated at St. Cuthbert's College, Ushaw, Durham. Called to the bar at the Inner Temple (1883). Returned as a Nationalist for Queen's County (1880-85); re-elected, Ossory Div. (1885). Was also returned for East Donegal, but elected to sit for Queen's County.

O'Connor, Mr. John, M.P., b. 1850. Returned as a Nationalist for South Tipperary (1885).

O'Connor, Mr. John, M.P., Lord Mayor of Dublin (1885). Returned as a Nationalist for South Kerry (1885).

O'Connor, Mr. Thomas Power, M.P., b. at Athlone, 1848; graduated M.A., Queen's University. Connected with the press from an early age, first in Dublin and afterwards in London. Has written a biography of Lord Beaconsfield. Was elected for Galway at the general election of 1880, as a Home Ruler; and took a prominent part in the debates in parliament. In the autumn of 1881 went on a prolonged lecturing tour in America for the Land League, and raised a large sum of money. Was present at the great Irish-American convention of 1881, with Mr. Healy and Father Sheehy. Returned to England in May 1882. At the general election of 1885 was returned for the Scotland Division of Liverpool, and for Galway borough—in both cases by large majorities. Elected to sit for the former. Has written "Gladstone's House of Commons," "The Parnell Movement," "Dead Man's Island," and many tales and essays. Has for three years been president of the National League in England and Scotland, which has control of the Irish vote; is the reputed author of the Irish manifesto calling upon the Irish voters to support the Tory candidates, which was supposed to have turned many of the elections in Lancashire, London, and elsewhere, in favour of the Tory candidates.

October Handicap. See **RACING.**

Odd-Fellows, Manchester Unity of. See **FRIENDLY SOCIETIES.**

Odelsthing. See **SWEDEN.**

Odessa. A rapidly developing Russian port on the Black Sea. Although less than a century old, its population is 190,000, and in point of size it ranks as fourth city in the Russian empire, St. Petersburg coming first, pop. 840,000; Moscow next, pop. 625,000; Warsaw third, pop. 340,000; lastly Odessa. Distant 1,137 miles from St. Petersburg and 933 from Moscow, Odessa has good ground for regarding itself as the capital of Southern Russia. It has derived its rapid growth largely from the export of grain. So long as the Turks held the whole of the coast of the Black Sea, agriculture in the provinces south of Moscow was cramped for want of an outlet. Directly Catherine the Great, however, secured the Black Sea littoral at the close of the last century, the population

began to spread over the southern plains, and their produce, added to that which filtered from the middle provinces down to the coast, gave plenty of lucrative trade to Odessa. Twenty years ago the total exports were valued at £4,000,000; they now exceed £12,000,000, in spite of the competition of other Black Sea ports and the rivalry of America and India. Recently a new trade feature has been introduced. Tea and other goods from the East that formerly made their way to London, and were thence despatched to Russia, are now conveyed direct through the Suez Canal to Odessa by the vessels of the Moscow volunteer fleet and the Black Sea Steam Navigation Company, thus depriving England completely of a considerable carrying trade, and increasing the importance of Odessa.

O'Doherty, Mr. James Edward, M.P., was b. 1848. Educated at Castleknock, Armagh, and Maynooth. Gold Medallist of the Incorporated Law Society. He became a solicitor (1870). Returned as a Nationalist for North Donegal (1885).

O'Doherty, Dr. Kevin Isod, M.P., F.R.C.S.I., L.K. and Q.C.P.I., was b. 1823. One of the originators of the *Irish Tribune* (1848), owing to which he was arrested and sentenced to ten years' transportation and sent to Van Diemen's Land. After some time he was granted a free pardon, with the condition that he should not reside within the United Kingdom. Admitted a Fellow of the Royal College of Surgeons, Ireland (1857), and Licentiate of the King and Queen's Coll. of Physicians, Ireland (1859). He has been a member of the Legislative Assembly, and afterwards of the Legislative Council, in Queensland. Returned as a Nationalist for North Meath (1885).

"O'Doherty, Morgan." See **NOMS DE PLUME.**

"O'Dowd, Cornelius." See **NOMS DE PLUME.**

Ecumenical Council at Rome. See **ITALY.**

O'Hagan, Lord, d. Jan. 31st, 1885. He was b. May 29th, 1812; called to the Irish bar (1836), and made a Queen's Counsel (1849). In 1860 he was appointed Solicitor-General, and in the following year Attorney-General for Ireland. In May 1863 he was elected M.P. for Tralee, and sat for that borough till July 1865, when he was appointed a Justice of the Court of Common Pleas in Ireland. In December 1868 he was appointed Lord Chancellor for Ireland; in June 1870 created a Baron of the United Kingdom; and on Mr. Gladstone's return to office in 1880 he was again appointed Lord Chancellor for Ireland, but resigned in November 1881, in consequence of ill health.

O'Hagan, Thomas Towneley O'Hagan, 2nd Baron (creat. 1870); b. 1878; succeeded his father 1885. The 1st Baron was Lord Chancellor of Ireland.

O'Hanlon, Mr. Thomas, M.P. Formerly member of the Board of Guardians in Newry, and member of the Town Council of Derry. He is engaged in commercial life in Derry. Returned as a Nationalist for East Cavan (1885).

O'Hea, Mr. Patrick, M.P., was b. 1848. He is a solicitor, and member of the Cork Town Council. Returned as a Nationalist for West Donegal (1885).

"Ohm." See **ELECTRICITY.**

"O. K.," a slang phrase, being a facetious equivalent for A.C. "All Correct," and implying "satisfactory."

O'Kelly, Mr. James, M.P., was b. 1845. Educated at the Univ. of Dublin. Formerly an

officer in the French army. Has been for years connected with the *New York Herald*. Author of "The Marubi Land," a history of his own adventures with President Cespedes in the Cuban insurrection. Returned as a Nationalist for North Roscommon (1885).

Old Catholics (Altkatholiken). One of the consequences of the declaration of **Papal Infallibility** at the Vatican Council of July 1870 was to lead to the formation of the sect of Old Catholics. Its followers, however, although refusing adhesion to this cardinal principle of the papacy, have never formally seceded from the Roman Catholic Church, and still claim a joint interest in the possessions of the parent Church, which, indeed, they continue, by state dispensation, to enjoy, both in Prussia and Baden. Chief among the founders of Old Catholicism was **Dr. Dollinger**, a Catholic theologian, whose resistance to the dogma of Papal Infallibility gained for him, in the very early days of the movement, the support of a large number of prominent German Catholics. These were, however, chiefly laymen, and for the most part Roman Catholic University Professors; the German Bishops who had attended the Vatican Council having, in spite of their protests against the issue of the decree of Infallibility, given in their adhesion to it soon after their return to Germany. Dr. Dollinger was joined at Munich by **Professor Friedrich** and forty-four other University Professors, who together issued the first protest against the Papal decree. This protest was supported by a number of other University Professors, including **Professors Michelis** and **Dittrich** of Braunsberg, **Weber** and **Baltzer** of Breslau, **Knoodt**, **Reusoh**, **Lange**, and **Hilgers** of Bonn, and **Von Schulte** of Prague. Chief among the earliest reforms introduced by Dr. Dollinger and his coadjutors were the freeing of the Catholic Church from the doctrines of the papacy, and the celebration of divine worship in the vulgar tongue. It was also agreed, at the **First Synod**, held at Bonn (May 27th to 29th, 1874) to abolish confession and fasting; and at the **Fifth Synod**, also held at Bonn, the marriage of priests was sanctioned by seventy-five votes against twenty-two. This latter step, however, has been the cause of some dissension between the Old Catholics themselves, and also disturbed their relations with the **Jansenists**, an excommunicated sect of the Roman Catholic Church, with whom the Old Catholics had, since 1872, held close communion. For having violently assailed the doctrine of infallibility, Dr. Dollinger was, in April 1871, excommunicated by the Catholic Archbishop of Munich. In September 1871 the Old Catholics held their **first congress** at Munich. The immediate result of this was to give the sect an organic basis, although it was not until 1873 that it became a thoroughly organised body. A **second conference** was held at Cologne in September 1872, and was attended by the Bishops of Lincoln and Ely, and the late Dean Stanley. A **third conference** followed, in June 1873, when **Bishop Reinkens** was, in an assembly of twenty-one priests and fifty-six laymen, elected the first Old Catholic bishop. Joseph Hubert Reinkens had participated in the movement from its earliest beginnings, and was one of the fourteen Nuremberg professors who, in August 1870, protested against the Vatican decree of Papal Infallibility. For this he was suspended from his professorship; and, continuing in opposition against the

papacy, he was, in 1871, formally excommunicated by **Bishop Förster** of Breslau. He was consecrated on August 11th, 1873, the ceremony being performed by the Dutch Jansenist Bishop of Deventer. At that time also Old Catholicism obtained the full recognition of the Governments of Prussia, Baden, and Hesse; **Bishop Reinkens**, who selected Bonn as his episcopal residence, receiving an annual endowment from Prussia of 48,000 marks (£2,400). Congresses have since been held almost annually in different towns of Germany and Switzerland, and have occasionally been attended by English divines and prominent members of Oriental Churches. Little more success, however, has attended the efforts of German Protestant writers, such as **Nippold** and **Beysslag**, to effect a general fusion of the German Protestants and Old Catholics, than attended Dr. Dollinger's advocacy, in March 1872, of a union with the Church of England. In Germany the Old Catholics at present number some 70,000. In Switzerland they are more numerous, reaching about 80,000. The leaders of the movement in Switzerland were the three Roman Catholic priests **Herzog**, **Egli**, and **Gschwind** (who for their defection from the papacy were excommunicated by the Bishop of Basle), and **Professor Munzinger** and **Herr Augustin Keller**, of Berne. The first meeting of Old Catholics in Switzerland took place at **Solothurn** (Soleure) in the autumn of 1871, although it was not until after the meeting at **Olten** in 1872 that Old Catholicism took root among the Swiss people. In the winter session of 1874-5 an Old Catholic faculty was created at the Berne University, to which, among others, **Herzog** was appointed. **Professor Herzog** was chosen as pastoral head of the Swiss Old Catholics (who are also called Christian Catholics) in 1876. In the following year there ensued a slight schism among the Swiss Old Catholics, and several of the priests reverted to the Church of Rome. Allied to some extent to the German and Swiss Old Catholics are the **Abbé Michaud**, who initiated a similar movement in Paris in the early part of 1872, and **Father Hyacinthe** (**Charles Loyson**), a former French Carmelite. **Father Hyacinthe** has been, in France, the most active opponent of the dogma of Papal Infallibility. In 1869 he seceded from the order of the Carmelites, and declared himself "a preacher of the Evangel." Previous to the Vatican decision of 1870, he lifted his eloquent voice against the Ultramontanians and the work of the Jesuits, demanding a thorough reform of the Church. He also opposed the enforced celibacy of the clergy, and gave effect to his views on this question by marrying an American lady at a registry office in London, in September 1872. During 1873-4 **Father Hyacinthe** had a church in Geneva. In 1876 he revisited London, delivering a course of lectures during his stay; and in 1879 opened the "**Gallican Church**" in Paris, over which he still presides. Old Catholicism also exists, but to a very slight extent, in Austria, Hungary (since March 1866 forbidden), and Italy.

Oldham "Strike." See TRADE OF 1885.

Old Red Sandstone. See GEOLOGY.

"Old Shekarry." See NOMS DE PLUME.

"Old Style." See CALENDAR.

"Old Tat." See TATTERSALL'S.

Old Testament Revision Company, The American. See REVISED BIBLE, THE.

Oleomargarine. See DAIRY FARMING.

Oligarchy. See DEMOCRACY.

"**Olphar Hamst.**" See NOMS DE PLUME.
Olsen. See OLD CATHOLICS.
O'Mahoney, John. See FENIANS.
O'Neill, Edward O'Neill, and Baron (creat. 1839, b. 1839, and succeeded his father 1883. Was M.P. for co. Antrim (1863-80). The 1st peer inherited the estates of the last Earl O'Neill, and received an English barony.

O'Neill, The Hon. Robert Torrens, M.P., was b. 1845. Educated at Harrow, and at Brasenose Coll., Oxford. Deputy Lieutenant for co. Londonderry; was High Sheriff (1871). Returned in the Conservative interest as member for Mid Antrim (1885).

One-Inch Ordnance. See GEOLOGICAL SURVEY.

One Thousand Guineas. See RACING.

Onslow, William Hillier Onslow, 4th Earl of (creat. 1802), was b. 1853. Holds the second title Viscount Cranley. Deputy Lieutenant of Surrey and High Steward of Guildford. The 1st peer was Speaker of the House of Commons.

Ontario, Province of. See CANADA.

Oolitic. See GEOLOGY.

Oppert, M. Jules. See ASSYRIOLOGY.

Opportunists. See FRENCH POLITICAL PARTIES.

"**Optic, Oliver.**" See NOMS DE PLUME.

Oral Law. See TALMUD.

Orange Free State. An independent Dutch republic in South Africa. It has Cape Colony on S. and S.W., Bechuanaland on N.W., Transvaal on N., Natal on E., Basutoland on S.E. Area estimated at 41,484 sq. miles; pop. 133,518, of whom 72,496 are whites. It is divided into 14 districts. Capital, Bloemfontein, pop. 2,600. Other centres are Ladybrand, Winburg, Kroonstad, Harrismith, Fauresmith, etc. It was formed in 1836-40, when Dutch Boers, becoming disaffected towards the new British Government at the Cape, "trekked" northward into the wilds in large numbers. Their outrages on the natives, and the wars that resulted, obliged the British authorities to annex Natal in 1840, and the Orange River Sovereignty—as it was then called—in 1848. However, by convention in 1854, it was declared to be "a free and independent state," and has since remained so under the title of Orange Free State. A constitution was proclaimed in that year, and was amended 1866. Executive vested in president (now Sir J. T. Brand, LL.D., Hon. G.C.M.G.), elected every five years by universal suffrage, and a council appointed by the Volksraad. There is also a Landrost appointed to each of the districts by the president, if confirmed by the Volksraad. The latter consists of 55 members, elected by universal suffrage for four years, half vacating their seats every two years. Roman-Dutch law prevails. There is a Supreme Court of three judges, and circuit courts. There is no standing army, except a small body of artillery at the capital; but about 14,000 men are on the rolls as liable to be called out in case of war. The Dutch Reformed Church is the dominant religion. The state devotes £12,000 a year to education. Revenue, £245,378; expenditure, £238,234; commerce passes through Cape Colony and Natal. There is no debt. The State is mainly pastoral, scarcity of water rendering great part of it unfit for agriculture. Principal products are wool, hides, ostrich feathers, also diamonds and garnets. The government possesses considerable property,

including three-fourths share in the National Bank. The capital has telegraphic communication with Natal. There are rich coal-mines. The State is, on the whole, prosperous and orderly. (See BOERS.) Consult Norris Newman's "With the Boers"; Sandeman's "Eight Months in an Ox-wagon"; Weber's "Quatre Ans au Pays des Boers," etc.

Orange River. See CAPE COLONY.

Oranmore and Browne, Geoffrey Dominick Augustus Frederick Guthrie, and Baron (creat. 1836; b. 1819, and succeeded his father 1860. Was elected a representative peer for Ireland in 1869. The family came to England with the Conqueror, and went to Ireland with Prince John (1181).

Orchestra. The foundation of the modern orchestra is the string quartet, composed of the first and second violins, viola, and violoncello, with the double bass (contrabasso) doubling the bass at an octave beneath. Next follows the wood wind quartet, composed of oboe, flute, clarinet and bassoon; but differing from the string quartet in each part being divided. There is always a first and second oboe, a first and second flute, etc., because while all the strings are as a rule playing together, it is only in loud crashes that all the wood wind is usually employed, far more frequent being the passages taken by one or another pair, as two oboes or two flutes playing in thirds or sixths, etc. The brass wind comes next. First are the horns, which always play in pairs because the blowing of high notes is so different from that of low notes that a "first horn" part is not readily playable by a "second horn" player. Sometimes there is another pair, called the third and fourth horns in that case. As two horns are necessary, it is manifestly an advantage to use them in chords where possible, and they serve the useful purpose of binding the whole orchestra together with their long soft full notes. Their scale is not complete, most melodies are therefore beyond their power; but in melodies written for them (as in Weber's overture to "Oberon," etc.) they give an inexpressibly beautiful effect. The trombones with their shifting apparatus are able to play every note. They are usually three in number in full orchestras (alto, tenor, and bass), and can play in chords. The trumpet, an instrument of similar construction, supplies the treble part. A fine quartet of brass by itself has a majestic effect, as in Mendelssohn's overture to "Athalia," etc. Finally the drums (i.e. the kettle-drums) are a department by themselves. They are two in number, and are tuned for each piece, one to the keynote and the other usually to the dominant. Sometimes a third drum is needed if another note is wanted. Other instruments often used are the harp, the big drum, with the cymbals and the triangle, the side drum, the euphonium (to enrich the bass of the brass), the piccolo (an octave above the flute), and the contra fagotto or double bassoon (an octave below the bassoon). This last is the lowest instrument in the orchestra, and the last but one is the highest. Two classes of instruments demand special peculiarities in writing. These are the horns and the clarionets. The horns can only play in one key, and even then cannot play a complete scale, therefore they have mouthpieces of various lengths so that they can be set in various keys. Their music is always written in the key of C, and at the beginning of the piece "horns in D," "horns in E flat," etc., tells

hem what mouthpiece to use. Therefore, although they always *play* in the key of C, they *sound* in whatever key the composer desires. The trumpets are also "transposing instruments," like the horns. One of the great points against the claimant in the Tichborne case was that, asserting he had been a horn-player when young, he yet could not answer the question "What key the horns played in." The other peculiar instruments are the clarionets. The clarinet can only play in a very few keys. Therefore for keys with sharps the A clarinet is used, and for keys with flats the rather smaller B-flat clarinet, while for the rest the C clarinet, smallest of the three, serves; but as its tone is rather shrill, one of the other two is used whenever possible. The fingering of all these is alike, and the fundamental tone is always written and played as C. Thus, if the key is E, the A clarinet is used, and plays apparently in G, its music being so written; or if the key be E-flat the B-flat clarinet would be used, and would play music written in the key of F, but sounding of course in E-flat. The key of the clarinet line in a score is therefore different from the key of the other instruments, and at its commencement "clarinet in A," or "clarinet in B-flat" is put. The first sounds a minor third lower, and the second a tone lower, than it plays. Otherwise the clarinet (supposing there were only C clarinets existing) could not play well in such keys as E-flat or in A, with three flats or sharps, and could not play at all in A-flat, or E, or in such keys with four flats or sharps or upwards. The tone of the B-flat clarinet is the finest of the three.

Orford, Horatio William Walpole, 4th Earl of (creat. 1806; b. 1812, and succeeded his father 1888. Sir Robert Walpole, the well-known minister, was the 1st Earl of Orford; the 4th Earl was his third son Horace, with whom, however, that earldom expired, while the barony of Walpole reverted under special limitation to his cousin, who obtained the earldom which the present peer enjoys.

Organ. One of the most ancient of all instruments. After the plan of blowing *through* the pipe was discovered, and the cutting edge was given by a hole a little way in, the whistle and flute family sprang into existence, and a row of whistles blown from beneath, probably by the breath, gave the first keyed organ. The performer could allow the wind to pass to any particular pipe by drawing a slide from beneath it, and stop it by replacing the slide. This is exactly the principle of the organ of the present day. Bellows, blown by hand or water or steam, fill a large reservoir with wind, whence by the pressure of heavy weights the wind is driven to the pipes. There are many stops in a large organ, each stop extending through the whole scale, and being in fact an instrument by itself; so that all the various stops in an organ make up a whole, just as the various instruments of an orchestra. Drawing a stop-knob, the organist allows the wind to pass along the channel supplying the whole of that stop. He can now depress one key, or several keys, on the keyboard, and thus draw away one pallet or several pallets beneath the pipes of the stop, and those pipes will at once sound, the rest of the stop being silent because the rest of the pipes are blocked against the wind each one by its pallet. These "whistle-stops" are called the *flute-stops* of the organ, and are of two kinds, open and stopped. Stopped pipes have

their upper ends filled with a stopper, which takes the "edge" off the tone, and greatly softens and clouds it. They are limited in use, in consequence, but form an agreeable variety. The other great class of stops is the *reed stops*. These are very rarely "free reeds," like harmonium reeds—that is, tongues of metal vibrating freely in a box or frame, just a very little larger than their own width; but organ-reeds are *beating-reeds*, elastic tongues of metal which can block out the wind from a pipe by closing an aperture in its side. When the stream of wind first blows against such a reed it strikes against the aperture and closes it, then it springs back by its own elasticity, and so vibrates to and fro, a series of puffs therefore passing into the pipe and setting the column of air within into vibration. From reed stops and flute stops the whole organ is built up. The tone of stops is altered by various devices—making them wide or narrow, of wood or of metal, narrowing to the top or bell-shaped outwards, with large mouths or small, etc., etc. Some stops are "overblown," that is, are made to give the octave harmonic above their natural tone. Such an organ as we have hitherto described is called a **Great Organ**. It is found of great convenience to take certain other stops and enclose them in a box, with centred shutters in its front, movable up and down by a pedal, so that the tone of these enclosed pipes can be allowed to pass freely, or can be partly or altogether shut off, and a fine *diminuendo* and *crescendo* obtained. This is called a **Swell Organ**; and when used with a great organ has all its action keys, etc., quite separate. The "swell manual"—*i.e.*, the row of keys for the swell stops—is placed above and further back from the performer than the "great manual." There is a third manual (that is, a third separate organ) often used, called the **Choir Organ**, the "choir manual" being beneath and nearer to the performer than the "great manual." The use of the choir organ is to provide the organist with an accompaniment to solo stops on the swell, without disturbing the arrangement of the great; to be used in contrast with the great; and for many such purposes. It has fewer and usually softer stops than either of the other organs. On very large organs a **Solo Organ** is provided, containing special solo stops, on a fourth manual. Besides the manuals (two, three or four according to the size of the organ) there is a row of large wooden keys played by the feet, called the "pedals." The **pedal organ** is composed of very deep bass stops of various qualities, and supplies the lowest notes of the harmony. To save the organist from having to move his position to reach the extreme keys, pedal boards are now usually made concave and radiated. **Couplers** are stops which cause the pedals to draw down corresponding keys on the manuals, or the keys of one manual to draw with them the keys of another, etc. **Combination pedals** are iron levers, pressed by the foot, each one drawing out a number of stops by the one operation, so as to provide the organist swiftly with various combinations, loud or soft, ready to his hand. The **swell pedal** is the lever working the shutters of the swell box. In the older organs it could be hitched into notches at one or two points of its descent, and so provide various degrees of loudness; but modern organs usually have a **balanced swell**, which remains in any position in which it is left by the organist.

Large organs are often obliged to be divided, (St. Paul's organ is divided into three parts, quite distant the one from the other, for instance,) the necessary connection, too long for "trackers," being obtained (as at St. Paul's Cathedral—Willis, 1872) by the agency of tubes full of compressed air, or by electricity, another invention of Barker's, patented in 1868. The organ at the back of the stage in the Lyceum Theatre (Bryceson, Dec. 1885) is played from the orchestra by means of electricity, for instance.—The size of some modern organs is enormous. The largest is that at the Albert Hall, London, which has 4 manuals and pedals, with 111 sounding stops, 14 couplers, 32 combination pistons, 20 combination pedals; and in all 7,806 pipes (Willis, 1870). The next largest is that at the Cathedral of the Incarnation, Garden City, New York, which has 115 sounding stops and 7,252 pipes. It would be impossible to play these organs, which have a pressure of 20 or 30 lb. on each key, were it not for the invention of the **pneumatic lever**, in which compressed air is made to do the work, the finger only having to set the pneumatic lever in action with a light pressure.

Oriel, Baron. See MASSEREENE.

Origin of Species. A species (*q.v.*), originally regarded as a group of living things all due to steady descent from one or two primary parent forms specially created, is now regarded as a group artificially marked off from other groups for the purpose of classification. The change in the view as to species was initiated by the publication, in 1859, of Darwin's "Origin of Species." This work not only taught that all species were the result of evolution,—it gave reasons for the belief in, and proofs of the fact of, evolution. (For the manner of evolution see NATURAL and SEXUAL SELECTION.) Here are considered only the chief lines of the argument that lead to the conclusion that species are evolved. Domesticated plants and animals vary. By this variation, under artificial selection, new breeds are formed, new varieties. Plants and animals in a state of nature vary. By this variation, modified by natural selection, new varieties (incipient species) and new species are formed. The chief difficulties in connection with this explanation of the origin of species are as follows. (1) **The supposed absence of connecting links**—*i.e.* of forms intermediate between certain specific forms existing or known to have existed. But (a) further investigation has revealed many of these transition forms, and (b) the geological record is imperfect. Many living forms cannot be preserved; many that could be, have not been. Many strata that contained fossil remains have been destroyed. (2) **The great complexity of certain organs**,—*e.g.* the human eye. But (a) there is a perfect series always to be found in living things, from the very simplest condition of an organ to the most complex; (b) the most highly developed organs in their development pass through stages of advancing complexity from the rudimental form up to their final condition. (3) **The persistency of certain low forms of life**, out of which, or their allies, the higher are supposed to have evolved. But (a) certain conditions of life may be favourable to these simple and persistent forms; (b) the conditions of life may be more favourable to the parent form than to any derived from it; (c) degeneration may occur of higher types to lower; (d) whilst one or a few of a

large number of a particular plant or animal may vary, and ultimately give rise to a new species, the vast majority may remain constant in character, and beget members of the old species. With the lower forms a **sexual reproduction** is very common, and this gives little chance of variation, whose chief determinants are changed conditions of the environment, and the collision of the characteristics of two different individuals in the reproductive cells. (4) **Apparently useless structures**, as the hairs on our hands. But these are generally the remnants of things useful in other animals. (5) **Instinct**. The difficulties in this connection are dealt with in the posthumous essay of Darwin incorporated with G. J. Romanes' "Mental Evolution in Animals." (6) **Hybrids**, or the results of the crossing of allied species. But (a) no evolutionist believes that new species originate thus; (b) mutual sterility between two species may be the cause rather than the result of specific difference. The chief arguments, other than those already advanced, in favour of the natural origin of species are as follows. (1) **The palæontological**. In the strata of the earth, the remains of organic beings form an ascending series of advancing complexity as we pass from older to more recent rocks. The simpler forms appear first; the more complex, their probable derivatives, later. (2) **Geographical distribution**. For this consult Wallace's "Island Life," and "Malay Archipelago." (3) **Classification**. The arrangement of the groups of animals and plants becomes intelligible on the view of the descent of living beings with modification from pre-existing forms. (4) **Morphology** (see BIOLOGY). The homologies or likenesses in structure of different parts of the same organism or of various parts in different organisms are explained. (5) **Embryology**, or the study of the development of a plant or animal from its earliest up to its adult condition, is in harmony with the theory. From this study has arisen the great generalisation, that the life of the individual is an epitome of that of the race; that every living thing goes rapidly through the stages that its ancestry went through in the course of myriads of years. (6) **Rudimentary organs**. Their presence in the living organism is comprehensible if that organism has evolved from others in which the organ concerned was well developed, and in active use. (7) **Atavism**, or reversion to ancestral forms, as when horses are born with stripes. In the study of the main question, two things must be borne in mind. First, that as a rule evidence of either the creation or the evolution of a species cannot be direct, but must be indirect, and that of this latter kind of evidence all that is possessed favours the doctrine of evolution. Second, that the two great factors in the development of species, as of individuals, are heredity and adaptation. Every living being inherits much from its ancestry; every living being is modified by its contact with the environment in which it lives. (Books of reference: Darwin's "Origin of Species," and "Animals and Plants under Domestication"; the works of Wallace, Huxley, Haeckel, Romanes, and indeed of almost all the scientific men since 1859.) See also NATURAL SELECTION.

Orkney, George William Hamilton Fitz-Maurice, 3rd Earl of (creat. 1696; b. 1827, and succeeded his father 1877. Served with the

71st Foot at the siege of Sebastopol and the capture of Kertch. Elected a representative peer for Scotland (1885).

Ormathwaite, Arthur Walsh, and Baron (creat. 1868); b. 1827, and succeeded his father 1881. Was M.P. for Leominster (1865-68), and for Radnorshire (1868-80).

Ormonde, James Edward William Theobald Butler, 3rd Marq. of (creat. 1825); Baron Ormonde (1821), which last title confers a seat in the House of Lords; b. 1844, and succeeded his father 1854. Is hereditary Chief Butler of Ireland. The 5th Earl was Lord High Treasurer of England (1455), and was great-grandfather of Anne Boleyn. The 12th Earl was created Marquis and subsequently Duke of Ormonde, for his services to the House of Stuart. His grandson, a distinguished military commander *temp.* William III. and Anne, was attainted in the reign of George I.; subsequently it was decided that this attainder could only affect the English titles, and consequently the earldom descended in due course.

Ormsud. See ANIMISM.

"Orpheus C. Kerr." See NOMS DE PLUME..

Orr-Ewing, Sir A. See EWING.

Orthodox Jews. See JEWS.

Oscar II., King of Sweden and Norway, b. 1829. He ascended the throne in 1872, in succession to his brother Charles XV., who died in that year. Before his accession he had served in the army, and risen to the rank of Lieutenant-General. He is a writer of no mean order, and he has translated Goethe's "Faust" into Swedish, and in consequence of the merits of this literary production the Frankfurt Academy of Sciences elected him a corresponding member. He married, in 1857, the Princess Sophia of Nassau, by whom he has as issue four sons: Gustaf, Duke of Wermeland; Oscar, Duke of Götland; Carl, Duke of Westergötland; and Eugene, Duke of Nerike. Fears of a serious conflict with the Norwegian republican party were entertained in 1884, but King Oscar succeeded in bringing the conflict to a peaceable issue.

O'Shea, Capt., M.P., was b. 1840. Educated at Trin. Coll., Dublin. Captain 18th Hussars, and J.P. for Clare. Returned in the Liberal interest as member for Clare County (1880-85); Galway City (1886).

Osman Nubia Pasha, Marshal. Celebrated for the defence of Plevna against the Russians (1877); b. in 1832 in Asia Minor. He trained for a military career at the Military College at Constantinople, which he left with the brevet of lieutenant. He took part in suppressing the rebellions of Syria (1860), of Crete (1867), and the Yemen (1874). He was made Marshal in 1875, after having repeatedly beaten the Servian army at Widdin. From thence he hurried to the defence of the Danube, but was unsuccessful, and resolved to fortify Plevna. The Russian army besieged the town, and met with a stubborn resistance, and in one battle lost over 20,000 men; but having maintained the siege, and General Gourko having been successful in cutting off reinforcements and supplies, the Russians forced a sortie. This action took place on December 10th, 1877; and after a terrible *mêlée*, Osman Pasha, badly wounded, had to surrender, and was made a prisoner of war. He was loaded with honours when he returned home after the Treaty of Berlin. He was charged with the reorganisation of the army, but resigned this post in 1880.

Ostrich Farming. One of the most profitable occupations of Cape Colony. The export of feathers reached 233,411 lb. in 1884. Africa is the home of the ostrich in its wild state, and thirty or forty years ago these birds were still to be seen in flocks of from twelve to twenty feeding upon the Karroo plains (see KARROO), sometimes in company with immense herds of springboks or other wild game; but so many were killed every year for the sake of supplying the trader with the plumage, that it had caused the sight of even a couple of birds to be of rare occurrence, and the price of feathers had become proportionably high. About twenty years ago it struck one or two of the farmers in the eastern province of the Colony that a few ostriches might very profitably be farmed in conjunction with other stock. In a few years' time ostrich farming had been found to succeed extremely well, and the sale of ostrich chicks proved lucrative. Frequent failure attending natural incubation by the hen, incubators were invented and used. Mr. Douglas' artificial incubator has been most successful, and has aided him in acquiring a large fortune. A mania seemed to possess not only farmers, who in many instances sacrificed sheep, goats, cattle and lands to ostriches, but even the townspeople converted the pony's paddock into an ostrich camp, or turned a pair of birds into the vineyard or the flower garden. Fabulous prices were given, £300 to £500 being no uncommon sum for a pair of tried good breeding birds; while chickens realised £5 each just hatched, and £8 or £10 when three months old. The market soon became glutted. Full-grown birds could be bought at £40 to £90 the pair, and more chicks than were required by the farmer himself were not hatched. Ostrich farming then settled down into a more steady industry, but not before hundreds who had rushed into it without sufficient capital had become insolvent. The vast Karroo plains, which abound in plants impregnated with alkaline salts, seem best suited to the birds as grazing ground; although they have been found to thrive in nearly all parts of South Africa, provided that certain phosphates be added to their food. Besides maize or Indian corn, lucerne, broken bones, etc., they are fed in times of drought with the fleshy leaves of the prickly pear. When the country is in good condition they graze without artificial food; they need plenty of space—sometimes running for a couple of miles at a stretch merely for exercise—but a slight wire fence will restrain them. When the feathers are in prime condition, they are cut with a pair of scissors, or a sharp penknife, about half an inch from the base, consequently quite clear of the skin; each plume is cut separately, and very carefully, so as not to injure the bird; the stumps wither and fall out easily after a lapse of about ten days. Were the feathers left to be cast naturally, as in moulting, they would be spoilt for commerce. The prime white feathers used to realise in the earlier days of ostrich farming £40 to £50 and even £60 per lb., but at the present time they are quoted at £15 to £18 10s.; blood feathers fetch from £35 to £55 per lb., while the inferior white and coloured feathers are now so low that the average price is generally below £5 per lb. An adult bird will yield feathers of an annual value of from £9 to £15.

"Othello." See IRVING, HENRY.

Otter, Mr. Francis, M.P., was b. 1831. Educated at Rugby and Corpus Christi Coll.,

Oxford. Fellow of Corpus. Called to the bar at Lincoln's Inn (1860). Returned in the Liberal interest as member for Louth Division, Lincolnshire (1885).

"Ouida." The *nom-de-plume* of a celebrated authoress of the present century, Mademoiselle La Ramée, a native of Ipswich. Her extraordinarily prolific genius and untiring work have enabled her to produce the large number of novels and tales which bear her name in a short space of time. The best known of her works are **"Puck," "Under Two Flags," "Held in Bondage,"** etc.

"Outcast London." In 1883 an inquiry was set on foot by the committee of the London Congregational Union in relation to the moral and spiritual condition of some of the dark regions of the Metropolis. By that inquiry the eyes of those who conducted it were opened to an appalling condition of things: a state of godlessness, of crime, of abject poverty and of despairing misery which it would be impossible adequately to describe. By means of a little pamphlet, entitled **"The Bitter Cry of Outcast London,"** the Union made known to the public some of the facts thus brought to light. That **"Bitter Cry"** ran through the length and breadth of the land. It touched the hearts of tens of thousands, and awoke a deep feeling of indignation, pain and sympathy in every direction. The special efforts which were put forth were kept as free as possible from denominational trammels, and measures were devised which have proved of material help in lessening the evils which were brought to light. Various mission halls, which were forthwith established in different parts of London, provided special religious accommodation for those who rarely or never attended ordinary church services. These have proved important centres not only for the preaching of the gospel but for mental improvement and philanthropic work. Attention was soon directed to the needs of many of the poor children attending the Board schools of the Metropolis. It was ascertained that very large numbers were existing day by day upon very insufficient food. Arrangements were made for remedying this sad state of things, and in a short time upwards of 10,000 breakfasts and 4,000 dinners were provided weekly for poor children. Agencies were also inaugurated for providing holidays by means of which additional brightness might be imparted to the lives of the children. A **"Clothes ministry"** was likewise established, by means of which upwards of 40,000 garments were distributed to the poor during 1885; in the majority of instances ministers, missionaries, district visitors, etc., being the channels for distribution. Large numbers of men have been assisted to emigrate to Canada and other parts, and reports received testify to the value of the help afforded them as a means of enabling them to obtain permanent employment. The entire movement is supported by voluntary contributions. Hon. treasurer, Albert Spicer, Esq., J.P., 50, Upper Thames Street, E.C.; Gen. sec., Rev. Andrew Mearns, Memorial Hall, Farringdon Street, E.C.

Oxenford, Baron. See STAIR.

Oxford and Cambridge Locals. Promoted by the delegates of the sister Uni-

versities, for the examination, classification, passing or rejection of pupils; the Oxford being held in June, the Cambridge in December. The pupils are divided into Seniors, over fifteen and under eighteen, and Juniors under fifteen years. The examinations are held at various centres throughout the United Kingdom, each centre being presided over by a secretary, and the examinations conducted by an examiner sent from the University. In the results the pupils are placed in Class I., II. or III. according to merit; or simply catalogued alphabetically as having satisfied the examiners, the names of the unsuccessful being omitted. Trinity College, London, has also instituted Local Examinations. It is estimated that an average of about 6,000 pupils present themselves annually to the three examinations, of which about three-tenths obtain honours, three-fifths satisfy the examiners, the rest being rejected.

Oxford and Cambridge Matches. See BOAT RACE, CRICKET, FOOTBALL, etc.

Oxford and Cambridge Press. See REVISED BIBLE, THE.

Oxford and Cambridge Universities and Women's Rights. See WOMEN'S RIGHTS.

Oxford, Rt. Rev. John Fielder Mackarness, D.D., 31st Bishop of (founded 1541), son of John Mackarness, Esq., a West Indian merchant; b. 1820. Educated at Eton, and Oxford Univ. Was Prebendary of Exeter Cathedral (1858-69); select preacher to the University of Oxford (1869). Consecrated Bishop of Oxford (Dec. 1869), to which is attached the office of Chancellor of the Order of the Garter.

Oyer and Terminer, Commission of. The commission issued to judges of assize, giving them authority to try criminal causes in each county into which they go. It is literally a commission **"to hear and determine,"** *oyer et terminer* being the old French equivalent for that English expression.

Ozone (*oso*, I smell), an especially active form of oxygen. **Preparation.** Ozone is formed whenever electric sparks pass through air, whenever water is electrolysed or decomposed by the action of electricity, and when a stick of phosphorus is placed in a confined space with a little air and water. **Properties.** A gas, colourless, but with a characteristic smell, heavier than oxygen in the proportion 24 to 16 or 3 to 2, inasmuch as in every 2 volumes of ozone there are 3 of oxygen condensed; a supporter of combustion, and a very ready oxidiser. When ozone combines with any substance and oxidises it, only 1 of every 3 volumes of the ozone enters into combination, and the other 2 are set free as ordinary oxygen. There is thus no alteration of volume. Ozone sets free iodine from potassium iodide. A test, therefore, for its presence is paper moistened with a solution of potassium iodide, mixed with starch. If ozone is present, iodine is liberated, and uniting with the starch a deep blue colour results. The presence of ozone in the air is said to greatly increase its invigorating, health-giving properties. Hence the selection of seaside and mountain districts for health resorts, where ozone is supposed to be more abundantly present than in cities and densely populated localities.

P

"P.A." See MARINE INSURANCE.

"Page, H. A." See NOMS DE PLUME.

Paget, Mr. Richard Horner, M.P., was b. 1832. Educated at the Royal Military Coll., Sandhurst. He is Deputy Lieutenant and J.P. for Somersetshire. Major 3rd Batt. Somerset Rifle Volunteers. Formerly capt. 66th Regt. Returned in the Conservative interest as member for East Somerset (1865-68), Mid Somerset (1868-85), Wells Division (1885).

Paget, Mr. Thomas Tertius, M.P., eldest son of the late Mr. Thomas Paget, M.P., was b. 1807. Is a Deputy Lieutenant and J.P. for Leicestershire (High Sheriff 1869). Bank proprietor, Leicester. Returned in the Liberal interest as member for South Leicestershire (1885).

"Pains and Penalties." See PARLIAMENTARY PROCEDURE.

Painters, The Worshipful Company of. See CITY GUILDS, THE.

Palæontological Record, The. See ORIGIN OF SPECIES.

Palæontology is the study of fossils. Fossils are relics of animal or vegetable life, preserved in the rocks in the same way that shells and other organic remains are being entombed in sedimentary deposits at the present day. A general succession of life, from lower to higher forms, may be traced throughout the geological series. The oldest reputed organic structure is the *Eozoon*, found by the Geological Survey of Canada in limestones of Lower Laurentian age. Sir J. W. Dawson regards it as a gigantic foraminifer—a conclusion corroborated by the late Dr. Carpenter, who at the time of his death (1885) was preparing a monograph on the subject. The organic nature of *Eozoon* has been denied by Professors King and Rowney, of Galway; and by Karl Möbius, of Kiel, and some other German palæontologists. The most ancient fauna or assemblage of animal remains yet recorded is that found by Dr. Hicks, in 1868, near the base of the Lower Cambrian strata of St. David's. Speaking generally, the most characteristic fossils of the **Palæozoic** or primary rocks are *trilobites* (crustaceans); of the **Mesozoic** or secondary series, *ammonites* and *belemnites* (cephalopods); and of the **Kainozoic** or tertiary group, *nummulites* (foraminifera). The earliest traces of vertebrate life in Britain consist of the remains of *Pteraspis* (*Scaphaspis*), found in 1859, by Mr. J. E. Lee, in the Lower Ludlow rocks of Shropshire. *Pteraspis* probably belonged to the Ganoids, a group of fishes which attained their maximum development during the Old Red Sandstone period, which is sometimes called the "Age of Fishes." The Amphibians, a group intermediate between fishes and reptiles, are first found as *Labyrinthodonts*, in rocks of Carboniferous age and are abundant in the Trias. Reptilian life was highly developed in the Secondary period. The gigantic *Ichthyosaurus*, the *Plesiosaurus*, and the *Pterodactyles* or flying reptiles, range from the Lias to the Chalk. The deinosaurs, including the famous *Iguanodon*, present certain points of resemblance to cursorial birds, such as the ostrich. Remarkable specimens have lately been found in Wealden deposits in Belgium.

The most ancient bird is the *Archæopteryx*, from the lithographic limestone of Bavaria (Upper Oolite), which exhibits certain reptilian features. Professor Marsh has described, within the last few years, some remarkable birds with teeth (*Odontornithes*), from the Cretaceous rocks of North America. The oldest relic of a mammal yet found in Britain is a small tooth of *Microlestes* (*Hysiprymnopsis*), obtained by Professor Boyd Dawkins from the Rhaetic beds of Watchet. Remains of the same genus, probably marsupial, have been found at a slightly lower horizon, in the Keuper, near Stuttgart. A South African mammal of Triassic age has been lately described by Sir E. Owen under the name of *Tritylodon*. Mammalian remains, chiefly the lower jaws of marsupials, are found in the Stonesfield Slate (Great Oolite), of Oxfordshire, and in the Purbeck beds of Swanage. In the Tertiary period mammalian life became abundant. Living species first appear in the Pliocene age, the hippopotamus being the most ancient species of placental mammal. **Palæobotany** or **Palæophytology** is a branch of palæontology relating to fossil plants. The palæozoic flora consists chiefly of cryptogamic or flowerless plants and conifers. Gymnosperms, or naked-seeded plants (conifers and cycads), characterise the Jurassic flora; and the familiar types of exogens first appear in the Cretaceous period.

Palæozoic. See GEOLOGY.

Palais Royal. See CO-OPERATIVE (APARTMENT) HOMES.

Palestine Geological Surveys. The topographical survey of western Palestine having been carried out under the Society of the **Palestine Exploration Fund**, and by officers of the Royal Engineers, it was determined to supplement this work by a geological survey of western Palestine, the Arabah valley, and the peninsula of Sinai, as far as this could be accomplished by a *reconnaissance* of geologists and engineers. Accordingly, in the autumn of 1883 an expedition was sent out from England, under the direction of Professor Hull, F.R.S., which was joined in Egypt by Captain (now Colonel) Kitchener, R.E., who undertook the charge of the topographical department. The party traversed Arabia Petrea by Mount Sinai (Jebel Musa), Akabah, the Arabah valley and the Dead Sea into Palestine. A narrative of the journey is given in "Mount Seir, Sinai, and Western Palestine" (1885), together with some account of the geological features and natural history of the region traversed. A geological memoir, combining not only the personal observations of Professor Hull, but those of previous observers, accompanied by maps, sections and drawings, will appear early in 1886. The structure and mode of formation of the deep depression of the Jordan valley and Dead Sea basin forms an important section of this memoir, which is brought out by the committee of the Palestine Exploration Fund. Amongst the maps will be one of the Wady el Arabah, constructed from the survey of Colonel Kitchener by Mr. J. Armstrong (formerly Serjeant-Major R.E.), who was a member of the exploring party. A geological survey of a portion of the same region, carried out by M.

L. Lartet, has been published by the Duc de Luynes, "Voyage d'Exploration à la Mer Morte" (Paris, 1880), which was a great advance on previous publications. (For our knowledge of the general geological formation of Palestine and Arabia Petrea we are chiefly indebted to the late Dr. Oscar Fraas, who has recorded his observations in a little work, "Aus dem Orient—Geologische Beobachtungen").

Paliser's Chilled Shot. See ARTILLERY.
"Pall Mall Gazette." Evening newspaper and review. Established 1865, by George Smith, of Smith, Elder & Co. Transferred to Henry Yates Thompson, his son-in-law, in 1880. Edited first by James Greenwood, who in 1880 was succeeded by John Morley, who in turn was succeeded in 1883 by W. T. Stead (*q.v.*). Its characteristics are the three 'I's'—Independence, Interviewing, and Illustration. It is the first daily illustrated English newspaper. Originally published at twopence. It was first published at a penny Jan. 1st, 1882. Published at 2, Northumberland Street, Strand.

Palmer, Mr. C. M., M.P., of Grinkle Park, Saltburn, was b. 1822, at South Shields. He is a large coal owner in Northumberland and Durham; the founder of the Palmer Ship-building Company, Jarrow; and an ironmaster and glass manufacturer. Mr. Palmer was elected first Mayor of Jarrow (1875); is an alderman of that borough, a J.P. for Durham and the North Riding of Yorkshire, and lieutenant-colonel of the 1st Newcastle and Durham Engineer Volunteers. Returned in the Liberal interest as member for North Durham (1874-85); Durham, Jarrow Division (1885).

Palmer, Mr. Hinde, Q.C. See WOMEN'S RIGHTS.

Palmer-Rigby, Major-General Christopher, d. April 14th, 1885. Served at Aden during 1840 and the two succeeding years, and was present at the repulse of two attempts by the Arabs to retake it. He was appointed an assistant in the Deccan Revenue Survey and Assessment (1843); was Western Bheel Agent in Khandeish and Assistant Magistrate (1847); President of the Military and Civil Examination Committee at the Presidency (1854); Superintendent of Bazaars and Police and Cantonment Magistrate at Poona (1856). He served on the staff during the whole of the Persian expedition in 1856 and 1857, and the subsequent occupation of the island of Karrack; and was Persian interpreter to Major-General Stalker, C.B. He was appointed agent for the East India Company, with the local rank of lieutenant-colonel, at Zanzibar, and in September following was appointed Her Majesty's Consul there.

Panama Canal and Isthmus. See ENGINEERING.

Pancreatine. Milk, cod-liver oil, and other fatty matters are emulsified by the use of pancreatine (a glycerine extract of the fresh pancreas), and thus rendered more easily assimilable by the finer subdivision of the oil globules.

Pangenesis (*pan* = all, *genesis* = reproduction). A theory broached by Charles Darwin in his "Animals and Plants under Domestication." Its aim is to give some explanation of the phenomena of *heredity* (*q.v.*)—i.e., of the tendency of a living organism to reproduce the anatomical and physiological characters of its ancestors. According to the theory of pan-

genesis, every part of every organ is constantly throwing off infinitely small particles or gemmules, that circulate through the body, multiply, are transmitted from parent to offspring, and are capable, under favourable conditions, of reproducing the part whence they came. The sexual cells, male and female, are especial collections of such gemmules, and in the course of the development of the ovum or egg, after its contact with the fertilising male structure, the gemmules may, and generally do, develop into parts and organs of the same nature as those whence they sprang. This "material" explanation of heredity is rejected by some thinkers for that of Haeckel—*parogenesis*. Here all transmission is of force rather than of matter. Forms of motion of the ultimate molecules of living bodies are transmitted to offspring, rather than the actual matter of such ultimate molecules. [See "Animals and Plants under Domestication," chap. xxvii; also "Pedigree of Man" (Haeckel, translated by Aveling, p. 211).]

Panslavists. A party in Russia, favouring the idea of a grand Slavonic confederation, in which the hegemony would belong to Russia. Its ranks are largely recruited among the Slavophiles, a party holding the belief that Slav culture is better and stronger than European civilisation, and destined to survive the latter. It is possible to hold this belief, this faith in Russia, without holding the Panslavistic doctrine of a union of the Slavs under Russian rule; several eminent Slavophiles believing that the Slavs of Austria and Turkey would do better if allowed to develop into a separate sister state. None the less, all Slavophiles sink their differences whenever a crusade against Turkey or Austria is broached, and range themselves under the militant Panslavistic banner. In 1876 they supported with funds the Bulgarian revolt, and one of their leaders, General Tchernayeff, conducted, with their assistance, a large number of volunteers to Servia to fight against Turkey. Their influence at court also was instrumental in bringing about the Turkish war. After the Berlin Treaty their power waned, and the death of Skobelev was a heavy blow to their aspirations; but they recovered strength when the present emperor, after his coronation, displayed in his policy sympathy with their views.

Panthéon (Le). A noble edifice, erected in Paris, devoted to the interment of illustrious men. Begun in the reign of Louis XV., it was finished under the Restoration. The pediment has engraved upon it: "*Aux grands hommes la patrie reconnaissante.*"

Papal Infallibility. See ITALY and OLD CATHOLICS.

Paper Railways. A system of compressed paper rails and railway carriage wheels is increasingly coming into use. An American company, established in the environs of St. Petersburg, has a large factory devoted to this special manufacture, authorised by the Russian Ministry of Finance, and is about to lay down a line with paper rails and wheels between the capital and the banks of the Neva and Warsaw.

Paraffin. See ILLUMINANTS.

Paraguay. A republic governed by president elected for four years, assisted by a Senate and Chamber of Deputies, elected directly—the former at the ratio of one member to 12,000 inhabitants, the latter of one member to 6,000. State religion Roman Catholic, but all others tolerated. Area 91,970 square miles. Pop.

about 350,000. Revenue estimated at £100,000; expenditure £70,000. Debt estimated at £3,600,000. Army, chiefly acting as police, numbers about 600. This country has been almost entirely ruined by the destructive war carried on between 1865 and 1870 with Brazil by the Dictator Lopez, the population having in that time diminished from 1,337,000 to its present amount. Since 1870 its history presents no features of interest.

Parallax, Solar. See ASTRONOMY.

Parbituja. See GHOURKAS.

Parcel Post, The. Was first introduced Aug. 1st, 1883. The public in this country had long suffered from the want of such an institution, and it was probably owing to the strenuous efforts made by the late Mr. Fawcett, when he was Postmaster-General, that the difficulties which had hitherto stood in the way of the parcel post being established here were overcome. Considerable opposition was displayed towards the scheme, both by the railway companies and private carrying agencies; but all such obstacles were met by Mr. Fawcett, who displayed great tact and energy in bringing the new service into operation; and since its establishment the system has proved extremely useful to the community, and is making good progress towards becoming a financial success. The parcel postage rates are 3d. for the first pound and 3d. for every additional two pounds up to seven pounds, which is the maximum weight allowed. The postage must be prepaid by means of ordinary postage stamps to be affixed by the sender. The words *Parcel Post* should be written or printed on the left-hand side of the parcel, immediately above the address. The greatest length allowed for an inland parcel is 3 ft. 6 in., while the length and girth combined may be as much as 6 ft. Thus a parcel measuring 3 ft. 6 in. in length may measure as much as 2 ft. 6 in. in girth; or a shorter parcel may be thicker, for, if it measure no more than 3 ft., it may measure 3 ft. round the thickest part. Parcels must not, of course, be posted in an ordinary letter-box, but must be handed over the counter of a post-office to the proper officer, by whom the size, weight and postage of each parcel is tested before being accepted. Certain parcels are prohibited from being sent: such as those bearing or containing writing or marks of an offensive or indecent character; or containing gunpowder, cartridges, lucifer matches, or other explosive or combustible material, live animals, or any substance likely to cause injury to other parcels or to the officers of the Post Office; while parcels containing such articles as eggs, fish, meat or other animal matter, or knives and other sharp instruments, can only be sent if so packed as to prevent all risk of injury to other parcels. Liquid matter must be contained in bottles, cases or cans securely stopped; and bottles and other glass articles must be so packed as to be secure from breakage. Rural postmen, whether on foot or mounted, collect, under certain regulations and restrictions, parcels from the public wherever they collect letters; but the senders are held responsible that parcels so posted are within the prescribed limits of weight and size, and are properly prepaid. The number of parcels carried by the Post Office increases steadily, and no less than 22,904,273 parcels were posted during the year ended March 31st, 1885. The gross amount derived from the postage on these parcels was,

for the same period, £508,070, of which 55 per cent. on railway-borne parcels, or £256,457, had to be paid to the railway companies, leaving £251,613 as the Post Office share. From returns prepared in June 1885, the number of parcels carried was at the rate of nearly 27,000,000 a year, being the number anticipated when the parcel post was first established. The parcel post has now been extended to certain **Foreign and Colonial countries**: amongst others, Belgium, Germany, Egypt, Aden, British Burmah, India, Hong Kong, Gibraltar, Malta, Cape Colony, Ceylon, Cyprus, and Jamaica. The rates (which vary, of course, according to the country concerned) are not excessive, and the maximum limit of weight in all cases is 7 lb. The rule as to dimensions is the same as for the inland parcel post, except in the case of one or two countries. **Dutiable articles** are, of course, liable to a charge for customs duty, which is levied on delivery. Colonial and foreign parcels are not accepted by rural postmen or mail drivers.

Parent and Child. The legal rights and duties of parent and child are different in English law accordingly as the child is legitimate or illegitimate. (1) **Legitimate children.** All children born after their mother's marriage are presumed legitimate. Their parents are not by any express provision of law bound to maintain them, but by various Acts for the relief of the poor the parent, or grandparent, of a child unable to work can be compelled to provide for its support; all relief given to children under the age of sixteen years, and not blind, or deaf and dumb, is considered as given to the father or his widow; a father who abandons his children to the care of the parish is liable to have his goods seized by the parish, and may be punished under the Vagrant Act. Moreover the supplying of necessities to infants will very easily raise the presumption of a valid contract by the father for the supply of such necessities. In so far as she possesses separate estate the mother is liable in the same way, as the father, although not so as to diminish his liability. Under the Elementary Education Acts parents are bound, if they can give no good excuse for doing otherwise, to make their children attend school from the age of five to that of fourteen years. On the other hand, the father has power to correct within reasonable limits his children under age, and has a right to the custody of their persons and the guardianship of their property, as also to appoint by will guardians for any of his unmarried children under age. The mother has no legal power over the children during the father's lifetime, but may, by an order of the High Court, obtain access to or the custody of them. After the father's death she is entitled to their custody until they come of age. A parent can claim redress for ill usage of his child, such as an assault or seduction; but only in the character of master, not of parent. He may assist the child in any litigation without making himself liable for maintenance. The consent of the father, and after his death of the mother, is requisite in the marriage of minors, but the marriage is not invalid for want of it. The child can be compelled to provide for the support of the parent when poor and unable to work. (2) **Illegitimate children.** The mother is entitled to the custody of these, and bound to maintain them until they reach the age of sixteen, or marry; and if she herself marry, the obligation passes to her husband. She may,

either before the birth of her child or within twelve months after, apply to a justice of the peace, naming a man as father of the child, who is then summoned to appear at petty sessions, and may be ordered to make a weekly payment for the maintenance of the child until it reaches thirteen, or, if the justices think proper, sixteen years of age. There is an appeal from such an order to quarter sessions. Provision has been made for removing children, legitimate or illegitimate, from the custody and control of parents of notoriously bad character. Where the father dies intestate the eldest legitimate son inherits all his real estate, and the legitimate children take in equal shares two-thirds of his personal estate if he have left a widow, and the whole of it if he have left none. Where the son dies intestate without wife or issue his real estate goes to the next heir, and his personal estate to his father; or, if the father be dead, then in equal shares to his mother and the surviving brothers and sisters. The mother's estate goes like the father's and a daughter's like a son's. Illegitimate children have no claims on a parent's estate in the event of an intestacy.

Parish Churches Bill. A bill introduced this session (Mar. 16th) in the House of Lords by the Bishop of Peterborough, and referred to a Select Committee. It enacts in the third clause that "every parish church in England and Wales is hereby declared to be for the free use in common of all parishioners for the purpose of divine worship according to the rites and ceremonies of the Church of England." Other clauses preserve vested interests in the letting of seats under various Acts. The bill has several times been before the House of Commons, Mr. Albert Gray in 1882 introducing it.

Paris, The Siege of. See FRANCE.

Parker, Rev. Joseph, D.D., minister of the City Temple, was b. at Hexham, 1830. Ordained in the Congregational body (1853). Has held the following church appointments:—Banbury (1853), Manchester (1858), London, Poultry Church (1869), City Temple (1873); Chairman of the Congregational Union of England and Wales (1884). Founder of the Nottingham Congregational Institute (formerly Cavendish College). Dr. Parker, in addition to being a popular and vigorous preacher, is also an author of repute. Among numerous works written by him may be mentioned "The Paraclete," "Ecce Deus," "Springdale Abbey," "Inner Life of Christ" (3 vols.), "Apostolic Life" (3 vols.), "Weaver Stephen" and "The People's Bible" (of which three parts have been at present issued).

Parker, Mr. Charles Stewart, M.P., M.A. Oxon, was b. 1829. Educated at Eton and Univ. Coll., Oxford. Graduated 1st Class Classical and 2nd Class Mathematical Honours (1852), being also Fellow and Tutor of his College. Member of the Royal Commission on Military Education (1869-70), and on the Endowed Schools of Scotland (1872-75). Private Secretary at the Colonial Office (1864-66). Returned as Liberal member for Perthshire (1868-74); Perth (1878-85); re-elected 1885.

Parkes, Sir Harry, British Minister at Peking, d. March 22nd, 1885. He was b. 1828, and in 1843 became assistant to the Rev. Charles Gutzlaff, Chinese Secretary and Interpreter to Sir Henry Pottinger, who negotiated at Nankin the first English treaty. Subsequently he was appointed interpreter to Sir Rutherford Alcock, Consul in succession at

Amoy, Foochow, and Shanghai. In 1848, after an outrage had been committed on some English subjects at Tsingpu, thirty miles from Shanghai, a mission, with Mr. Parkes as interpreter, was sent to Nankin to obtain redress; and Mr. Parkes, who had himself been attacked by a mob at Foochow a few months previously, and barely escaped with his life, was specially complimented on the tact with which he conducted the negotiations. In 1848 he was appointed Consul at Canton, in succession to Mr. Alcock. Having taken a prominent part in the events prior to the signature of the Treaty of Tientsin, Mr. Parkes had a no less important share in those which followed the refusal of the Chinese to ratify that treaty, and the repulse of Admiral Hope's squadron before the Taku forts (1859). Mr. Parkes by skilful diplomacy succeeded in obtaining "a lease in perpetuity" of Kowloon and Stonecutter's Island, places well suited as stations for European troops. He accompanied Sir Hope Grant's expedition to the north; and after the landing of the allied forces at Pehtaug it was he who discovered a plot to blow up the place on the entry of the foreign troops. When the expedition reached Tientsin Mr. Parkes was employed, in connection with Mr. Wade, in carrying on negotiations with the Chinese envoys, but they soon found that these officials did not possess full powers. The *pourparlers* were accordingly broken off, and the advance on Peking was resumed. This movement induced the Chinese Government to make a further attempt to delay the march. The Emperor's nephew was deputed to reopen negotiations, and Mr. Parkes was instructed to go forward to meet him at Tungchow, while the allied forces advanced more slowly towards that place. Mr. Parkes reached Tungchow, and hastened into the presence of the Prince. By this time the Chinese Commissioner had obtained as much delay as he could hope for, and to all the remonstrances of the English representative his reply was, "There can be no peace—there must be war." Mr. Parkes had performed his duty; but it now remained to save his party, by this time augmented by Mr. Loch, Captain Brabazon, and two Sikhs. They rode rapidly away from Tungchow, but on passing into the plain they found that the battle had begun. They still carried a flag of truce; and Mr. Parkes, as the one chance of safety, rode through the ranks of the Chinese army to the General, and claimed a safe-conduct, according to the usages of war. Instead of receiving his prisoners with consideration, the General ordered his soldiers to treat them with indignity, forcing them to make the kotow, and binding their hands and legs. When the battle went against them, they placed all their prisoners in springless carts and sent them off to Peking, where they suffered great cruelty. During the negotiations the Chinese agreed to release Mr. Parkes by himself; but he refused to accept his liberty unless the same favour were granted to his companions. It was in expiation of this outrage that the Summer Palace was destroyed. In 1862 he was rewarded for his exceptional services with a K.C.B.; and three years later he was appointed Minister at Yeddo. On his last visit to England, he received the Grand Cross of the Order of St. Michael and St. George. In 1883 he was transferred from Yeddo to Peking, thus crowning his career with the attainment of the object of his ambition.

Parliament, Privileges of. See PRIVILEGES OF PEERS AND MEMBERS OF PARLIAMENT.

Parliamentary Obstruction. See OBSTRUCTION, PARLIAMENTARY.

Parliamentary Procedure. The Houses of Lords and Commons differ from each other not only in regard to their constitution, but likewise in respect to their powers and methods of procedure. It is in the **House of Peers**, for instance, that the Sovereign meets Parliament, and the formal ceremonies connected with the opening or proroguing of the Legislature are gone through. On these occasions, as also when the Royal Assent is given to public or private bills, the "faithful commons" merely attend upon their lordships. But, on the other hand, the House of Commons has an individuality of its own, which is yearly becoming more marked. Its powers and privileges are enormous: it is in the Lower Chamber exclusively that the national estimates are voted, and it is in the Commons that the majority of important legislative proposals are initiated. The powers of the **Lord Chancellor**, who presides over the deliberations of the House of Lords, differ widely from those exercised by the Speaker of the House of Commons. He is not the judge or guardian of order, and if two or more peers rise together the House itself decides who shall first be heard. The simple duties of the Lord Chancellor (who need not necessarily be a peer) consist in "putting the question," and he is not debarred from taking part in a debate. He has, however, no casting vote in divisions, and if the numbers are equal the "not-contents" prevail. Another peculiarity of procedure in the House of Lords is that the speakers do not address the presiding peer but the whole House. With regard to the origination of bills, the House of Lords has exclusive power concerning those relating to a restitution in blood and a restitution in honours. It has always been held that bills of "**pains and penalties**," or other measures founded on oral testimony, should originate in the Lords; and until 1871 the House of Commons had not the power which their lordships had of examining witnesses on oath. The **Royal Assent** to bills is always given in the House of Lords, more frequently by commission than otherwise; and it is a curious circumstance that the French language is still employed in connection therewith. When a public bill is approved, the clerk says, "*Le roi (or, la reine) le veut.*" If the measure be a private one he says, "*Soit fait comme il est désiré.*" Should the bill have subsidies for its object, the official says, "*Le roi (or, la reine) remercie ses loyaux sujets, accepte leur bonté, et aussi le veut.*" If the Sovereign thinks fit to refuse approval to a measure, the clerk then says, "*Le roi (or, la reine) s'avisera.*" This power of rejection, it may be noted, was last exercised, by Queen Anne, in the year 1707. The most striking feature in connection with the procedure of the **House of Commons** is the wide power vested in the **Speaker**. This great officer must have been anciently, as at present, the organ or spokesman of the Commons, although in modern times he is more occupied in presiding over the deliberations of the House than in delivering speeches on their behalf. Unlike the Lord Chancellor, the Speaker must abstain from debating, unless in committee of the whole House; and even there he rarely takes advantage of his right. The member of the

House who is elected to the office of **Speaker** usually acts quite independently of party considerations. He never votes, save when the numbers happen to be equal, in which case he gives the casting voice. The chief duty of the Speaker undoubtedly is the preservation of order, with respect to which the rules of the House of Commons are very stringent. It is out of order, for instance, for a member of Parliament to refer to any other member by name; he must speak of him as "the hon. member for so-and-so." Again, all remarks must be addressed to the Chair, and not to the House. It is likewise out of order to speak in direct terms of any proceedings of the other House of Parliament, unless they have been formally made known by "**message**," or recorded on the notes of the House of Peers. When a reference to the proceedings of the House of Lords is desired, however, the difficulty is got over by alluding to what has transpired "in another place." It is irregular, too, to refer to the opinions of the Sovereign, speeches and messages from the Throne being regarded as the sentiments of the Ministry alone. By the rules of procedure passed in the year 1882, the Speaker has power to "name" any member of the House who disregards the authority of the Chair; and such member, at the instance usually of the leader of the House, is suspended from the service of the House, on the first occasion for a week, on the second for a fortnight, and on the third, or any subsequent occasion, for a month. In extreme cases the Speaker may order members into custody until the pleasure of the House be signified. Similar disregard of order in Committee of the whole House is also immediately reported to the House, and like action taken. The new rules of 1882 were not, however, solely aimed at recalcitrant members, but effected considerable alteration in the method of conducting parliamentary debates. They empower the Speaker, when in his opinion a subject has been "adequately discussed," and it is the "evident sense of the House that the question be now put," to so inform the House. If a motion is then made "That the question be now put," the Speaker will forthwith put such question, and, if decided in the affirmative, the question under discussion will at once be put. A provision is made, however, that the motion "That the question be now put" is not decided in the affirmative unless supported by more than two hundred members, or unless opposed by less than forty members, and supported by more than a hundred members. Motions for the **adjournment of the House**, which formerly gave an opportunity for the raising of any subject immediately after question time, and before the House reached the "orders of the day," are rendered impossible by the new rules, unless a member proposes to move the adjournment for the purpose of discussing "a definite matter of urgent public importance," and the motion is supported by not less than forty members. Motions for the adjournment of a debate must be confined to the matter of such motion, and no member can move or second more than one such motion during the same debate. The Speaker is also empowered, where he shall deem a motion for the adjournment of a debate to be "an abuse of the rules of the House," to put the question forthwith. He may also call upon the supporters of such a motion to rise in their places,

and if there be less than twenty in a House of forty members or upwards, he may forthwith declare the determination of the House. The Speaker may also call the attention of the House to "continued irrelevance" or "tedious repetition" on the part of any member, and may direct him to discontinue his seat. These new rules also apply to committees of the whole House as well as to the House itself. By a standing order passed in 1879, it is provided that no opposed bill can be taken after 12.30 p.m., unless it has entered the "committee" stage; but by the rules of procedure of 1882, motions for the appointment of standing committees are exempted from the operation of this order. In the House of Commons no public bill can be introduced without leave, and on that being given, the measure is formally read a first time. On the second reading the principle of the measure receives consideration, and until it has passed this stage it cannot be altered or amended. The bill is subsequently referred to a Committee of the whole House, or it may, by the rules of 1882, be sent to a standing committee of from sixty to eighty members appointed to consider measures of a certain class. After amendment in committee, a formal report is received, the measure is subsequently passed, and taken to the House of Lords, where practically the same form is gone through. The only exception to these proceedings arises in the case of an Amnesty Bill, which is read but once in each House. Only the Royal Assent can convert a bill into an Act of Parliament. It occasionally happens that the opponents of a bill are not desirous of meeting the motion for its second reading with a direct negative. An amendment is therefore proposed to the effect that the bill "be read this day three months," or "this day six months," it being understood that three months or six months hence the House will not be sitting. In the cases of motions in respect to which the House is also unwilling to come to a decision, "the previous question" may be carried, and, as the previous question has already been determined, the other business of the day is at once proceeded with. The business of both Houses of Parliament, but more especially of the House of Commons, is transacted very largely "in committee." When the whole House is in committee the Speaker vacates the chair, the mace is removed by the Sergeant-at-Arms, and the Chairman of Ways and Means or another member of the House presides. Proceedings relating to the expenditure of public money take place in Committee of Supply, while in Committee of Ways and Means resolutions having reference to the funds by which such expenditure is to be sustained, are passed. There are also Select Committees chosen for specific purposes, and committees for the consideration of private bills, the procedure in respect to which is not very dissimilar to that followed in regard to public measures. No member of the House of Commons can, as a matter of fact, resign his seat, but this end is attained by his acceptance of the "Chiltern Hundreds." No office having emolument attached can be conferred on a member of the House of Commons without his vacating his seat; and therefore by obtaining "the stewardship of Her Majesty's Chiltern Hundreds, the stewardship of the Manor of Poynings, of East Hendred and Northstead, or the Escheatorship of Munster," a member

may rid himself of his duties. In cases where appointments are not directly conferred by the Crown, but by the heads of departments, a member need not resign his seat; and by the Reform Act of 1867 it was specially enacted that members already in office should not vacate their seats on accepting other Crown appointments. The late Salisbury administration proposed to make new rules of procedure one of their principal measures. Mr. Gladstone has adopted the main principles indicated, and the Select Committee appointed by the House of Commons to inquire into the rules of Procedure of the House held their first meeting March 22nd, 1886. The Marquis of Hartington was elected chairman at a preliminary meeting on March 18th. The Select Committee nominated by Mr. Gladstone to consider the question of Parliamentary Procedure consists of thirty-nine members—sixteen Liberals, five of them being of Cabinet rank; thirteen Conservatives, three of whom were members of the late Cabinet; and four Parnellites. Subjoined are the names: Liberals—Marquis of Hartington, Mr. Bright, Mr. Chamberlain, Mr. Goschen, Sir W. Harcourt, Sir A. Bass, Dr. Cameron, Mr. Courtney, Mr. Dillwyn, Mr. Duff, Mr. Illingworth, Mr. Leake, Mr. Rylands, Mr. Craig Sellar, Sir H. Vivian, and Mr. Whitbread. Conservatives—Sir Michael Hicks-Beach, Mr. W. H. Smith, Mr. Stanhope, Sir W. Barttelot, Sir W. H. Hart-Dyke, Sir J. Fergusson, Sir J. Gorst, Mr. Holmes, Sir John Mowbray, Sir R. Paget, Mr. Raikes, Mr. Slater-Booth, and Mr. Whitley.

Parliaments, Local. Debating societies founded on the plan and methods of procedure of the House of Commons, each member constituting the "house" taking the name of some selected constituency. A speaker is elected, a "government" and "opposition" formed, bills are introduced, debated upon, and votes taken, etc. Local parliaments have their origin in the days of Canning, who mentions the great advantage he derived from a debating society formed on the model of the House of Commons. In 1849 a similar society was formed with much success by the members of the Whittington Club, Arundel Street, Strand. Since that time, more particularly of recent years, these institutions have greatly developed.

Parnell, Mr. Charles Stewart, M.P., b. at Avondale, in county Wicklow, 1846, is a descendant of Parnell the poet, and his family have been associated with Irish parliamentary life for upwards of a century. They come originally from Congleton, Cheshire; and Sir Henry Parnell, grand-uncle of Mr. Parnell, when raised to the peerage, took the title of Lord Congleton. Educated mainly in England, he went to Cambridge University, but did not take any degree. After a tour in America—his mother is an American by birth, daughter of Admiral Charles Stewart, a famous American sailor—he settled down on his property in Avondale; was High Sheriff of the county in 1874; wished to stand for the county, but was not allowed to resign his office. A month later, when Colonel Taylor, on appointment to the Chancellorship of the Duchy of Lancaster, sought re-election, Mr. Parnell opposed him, but was defeated. Stood for county Meath on the death of John Martin (in 1875), and was elected. First took an active part in parliamentary affairs in the session of 1876, when in association with Mr. Biggar he initiated what

was known by the various names of the "obstructive" and the "active" policy. He opposed with great persistence the bill for annexing the Transvaal; the flogging clauses in the Mutiny Act; and the Prisons Bill; and there were many scenes of violence and excitement, and several all-night sittings of the House. He finally succeeded in getting some modifications in the treatment of political prisoners introduced into the Prisons Bill; and being joined by Mr. Chamberlain and other leading Radicals, he led to the abolition of flogging in the army. He joined in the foundation of the Land League, and in October 1879 was elected its first president. He first, at a meeting at Westport in the previous June, used the phrase "Keep a firm grip of your homesteads," which became the watchword of the agitation. He went to America in December 1879, raised the sum of £70,000 in aid of the distress then widespread in Ireland, and for the Land League movement. At the general election of 1880 he was elected for county Meath, county Mayo, and the city of Cork; and elected to sit for the last mentioned place. He was elected in May 1880 leader of the new party by twenty-three votes to eighteen for Mr. Shaw. He took an active part in the Land League agitation outside parliament, and in the debates in the House; and after the Land Act was passed was arrested in October 1881 on a charge of intimidation and obstructing the working of that Act. He was released on parole in April 1882, and finally in May. At the general election of 1885 he was re-elected for Cork, and his action in influencing the Irish vote secured the return of many Conservative candidates, and proportionally weakened the Liberal party, with whom, however, Mr. Parnell later on formed an alliance, and by the vote of the Irish party overthrew the late Government on Mr. Jesse Collings' amendment to the Address (Jan. 26th, 1886). Mr. Parnell's name is at present (March 27th) prominently before the public in connection with the Home Rule proposals of Mr. Gladstone.

Parthenogenesis, (*parthenos*, a virgin, *genesis*, reproduction). Originally used by Owen for alternation of generations,—i.e. for those cases in which a plant (e.g., a fern) or an animal (e.g., a tape-worm) goes through two stages in its life-history. One of these stages is a sexual one, and gives rise to the other asexual one, which reproduces ultimately the sexual condition of the living thing. This is better called **digensis**. Parthenogenesis is now applied in a more limited sense to one process only in the alternation of generations in certain animals, and to the same process when it occurs abnormally in the life-history of certain insects. Whenever from female insects offspring are produced without any preliminary fertilisation of eggs or ova by the male, parthenogenesis occurs. 1. **Regular parthenogenesis**. The eggs of the bee, if not fertilised, produce drones, or males; if fertilised, workers or neuters; or if the progeny is specially fed, queens or females. The drones only are, therefore, the result of parthenogenesis. In the plant lice or aphides, from the females that emerge from the eggs that are the result of true sexual commerce, are developed generation after generation of asexual aphides, all by parthenogenesis, until at last the sexual generation reappears. 2. **Irregular**. The wasp, the gall-fly, the psyche-moth, and occasionally the silkworm-moth, show this phenomenon. The eggs from which the par-

thenogenetic insects are developed are probably rather of the nature of buds than of true ova, and are best called pseud-ova or false eggs.

Pas en arrière. See HEREDITY.

Passion Plays. See OBERANIMERGAU.

"Pastel". See NOMS DE PLUME.

Pasteur, M. See HYDROPHOBIA.

Patten Makers, The Worshipful Company of. See CITY GUILDS.

Patti, Madame Adelina Clorinda. One of the greatest operatic singers of the present day; b. at Madrid in 1843. She trained professionally under Maurice Strakosch, and made her first appearance on the stage at New York in 1859. Her splendid voice and skill as an operatic artiste of the first rank speedily secured her a leading position. She first appeared in London in 1861, in the character of Amina in "La Sonnambula," at Covent Garden, and became the favourite *prima donna* of the day. In London and Paris, Vienna and St. Petersburg, and in the United States, Madame Patti is a universal favourite. In 1870 she received from the Emperor of Russia the Order of Merit, and the appointment of First Singer at the Imperial Court. She married in 1868 M. Roger de Cahuzac, Marquis de Caux.

Pattison, Rev. Mark, late rector of Lincoln College, Oxford, b. 1814, was the son of a Yorkshire clergyman. Educated at home, he subsequently entered at Oriel College, Oxford, where his talents and intellect soon attracted notice. He graduated 1837 (M.A. 1840), in which year he entered holy orders, and also was elected to a Fellowship at Lincoln College. In 1841-2 he gained the Denyer Theological Prize Essay, and in 1851 took the degree of B.D. He was Fellow of Lincoln (1840-61), Tutor (1843-54), Public Examiner (1848-49, 1853-54, and 1870-71). In the year 1861 he was elected Rector of Lincoln College, which office he held till his death, September 30th, 1884. A man of intense energy and breadth of intellect, he set his stamp on the University; and by his well-known theological knowledge and forcible opinion raised himself to a high position among the divines of his day.

Paulton, Mr. James Mellor, M.P., of Boughton Hall, Woking, Surrey, was b. 1857. Educated at the London International College, and at Trin. Hall, Camb., where he graduated with honours in the Historical Tripos (1879). He was for some time private secretary to Mr. J. Bryce, M.P. for Aberdeen. Returned in the Liberal interest as member for Bishop Auckland Division, Durham (1885).

Pauperism and the Poor Laws. From time immemorial the experience of communities has been that a certain proportion of the persons composing them fall into a state of extreme poverty. This condition may arise from a variety of causes—ill-health, indolence, or sheer misfortune. But, however poverty may occur, it has always been a recognised duty among civilised peoples for the rich to help the poor. This help was, until about three-and-a-half centuries ago, given in England in a pernicious way, and without any state control or interference except as to the places in which begging would be allowed. The religious houses charged themselves with the care of the poor to a large extent, and when these houses were abolished the country was overrun by vagrants. This necessitated the passing of an Act, in 1536, which provided that the head-officers in parishes, towns, and counties should take

charge of the impotent poor, collect alms for their support, and at the same time compel able-bodied mendicants to work for a livelihood. Indiscriminate almsgiving was forbidden, and sturdy beggars were to be treated without mercy. For a first offence the sturdy beggar was to be whipped, for the second he was to have his ears cropped, and for the third the penalty was death. But neither this Act nor several others which immediately succeeded it proved effective. The great difficulty was to obtain sufficient funds to relieve all the necessitous. In 1572 compulsory assessment for the support of the poor was resorted to, but it was not till the Act 43 Elizabeth, c. 2 (1601), was passed, that the foundation of the present system of poor-relief was laid. This Act was designed "to set the poor to work, to relieve the lame, impotent, old, and blind, and to put out their children as apprentices." A labour test for able-bodied paupers was provided, and "houses of correction" for the application of this test were ordered to be built. Such was the origin of the existing workhouse system, though of course many modifications have been introduced. An Act passed in 1662 established the law of settlement; and in 1723 parishes were empowered, either singly or in combination with others, to provide workhouses. An Act known as "Gilbert's Act" (1783), introduced many important changes in the system of dealing with the poor. This Act bristled with absurdities, and its chief results were an enormous increase in the rates, general degradation of the lower orders, and an alarming increase of immorality. The poor-rate, which in 1776 was only £1,720,316, rapidly bounded up, until in 1818 it reached £9,320,440. The latter year was one of scarcity, and the charge was somewhat lower in the years immediately following, though still unreasonably high. As the heavy poor-rate continued during a period of advancing national prosperity, it came to be recognised that some serious defect existed in the system of dealing with the poor, and in 1832 a Royal Commission was appointed to inquire into the subject. The report of this Commission made some startling disclosures, and resulted in the passing in 1834 of the Poor-Law Amendment Act, which swept away many abuses, and introduced a more satisfactory order of things. Commissioners were appointed to direct the action of the local boards of guardians. Unions were formed, and workhouses were established, and the system as we now know it fairly inaugurated. The expenditure on the poor rapidly decreased, until in 1837 it amounted to only £4,044,741. An Act passed in 1847 introduced some changes which experience had found to be desirable. The controlling power under the poor-laws is now vested in the Local Government Board.—In Scotland sturdy beggars had become so troublesome, that in 1679 a severe Act for their repression was passed. It ordered that strong and idle beggars should be scourged and burnt through the ear with a hot iron, and if after such punishment they persisted in begging, they were to be put to death. "Aged, pure [poor] impotent and decayed persons, quihlk of necessitie mon live bee almes," were declared to be entitled to parochial relief. Other laws followed, at longer or shorter intervals; but the most important enactment was the Poor-Law Amendment Act (1845), on which the existing system in Scotland is based,

the central control being in the laws of the Board of Supervision. Though in Ireland numerous institutions for ameliorating the condition of the poor existed, it was not till after the Royal Commission (1835) completed their inquiry that a modified form of the poor-law as established in England was introduced, and the administration of relief placed on something like a satisfactory footing. The cost of maintaining paupers in England and Wales at different times during the last forty years is shown in the following table:—

Year.	Popula- tion.	Levy for Poor-rate.	Rate per head of Poor-rates levied, and rate per head of Relief on the esti- mated population.			
			Levy.		Relief.	
		£	s.	d.	s.	d.
1844	16,410,000	6,847,205	8	4½	6	0½
1854	18,617,000	6,973,220	7	6	5	8
1864	20,663,000	9,448,319	9	1½	6	2½
1874	23,580,000	12,342,281	10	5½	6	6
1884	26,770,744	14,282,918	10	8	6	3½

In 1884, the receipts in aid, inclusive of the Treasury subventions, amounted to £1,103,732, which raised the total receipt to £15,386,647. Of this amount £6,952,238 was expended for other purposes than the relief of the poor, such as payments to county, borough, or police rates, highways, and school boards—the latter item amounting to £718,846. The money applied to outdoor relief was 55·8 per cent. of the whole expenditure, the indoor relief being 44·2 per cent. In the year mentioned there were 180,846 indoor, and 585,068 outdoor paupers relieved; the total of paupers being in the ratio of 28·6 per 1,000 of the population. The cost per head of the indoor paupers was £10 19s. 5d. for the year, and of the outdoor paupers £4 13s. 3½d. In Scotland the number of registered paupers has fluctuated between 80,334 in 1869, and 58,415 in 1885, and of casual poor between 3,690 in 1869, and 2,458 in 1885. The expenditure in relief and management was £821,184 in 1869, and £830,641 in 1885, the average annual cost of each person relieved, being £6 os. 8½d. in 1869, and £8 13s. 11d. in 1885. The pauper lunatics numbered 11,160 in 1885, and their maintenance cost £21 19s. 1½d. per head. During the same year 25,936 natives of Ireland received relief in Scotland. The number of paupers in Ireland in 1884 was 416,982, and the poor-rate amounted to £1,160,416.

Peace Preservation Act, 1870. Forbade the use of fire-arms without license in any proclaimed district, gave the Grand Jury power to levy a cess upon any districts in which outrages had been committed (wherewith to compensate the victims), and empowered domiciliary visits and the arrest of loiterers. Introduced by Mr. Chichester Fortescue (1870) mainly to prevent outrages in Mayo, and carried without dissent. In 1880 allowed to expire by the Gladstone Government.

Peace Preservation (Ireland) Act, 1881. This Act continues in force until the 1st of June, 1886. Under it the Lord Lieutenant may, with the advice of the Irish Privy Council, pro-

claim any district, and thereafter no person is to have or carry arms or ammunition in that district, save as authorised by the proclamation. Any person reasonably suspected of having or carrying arms or ammunition in contravention of the Act may be arrested without warrant by any constable, and upon conviction before a court of summary jurisdiction is liable to a maximum penalty of three months' imprisonment, or £50 fine. The Lord Lieutenant may issue a warrant to search for arms and ammunition, which must be executed within ten days, and if any be found under circumstances which contravene the Act they are forfeited. Arms or ammunition voluntarily given up, or not wilfully kept back, are to be preserved for restoration to the owners whenever the proclamation expires. They may, however, be purchased from the owners. The Lord Lieutenant may, with the advice of the Irish Privy Council, make orders prohibiting or regulating the sale or importation of arms or ammunition. All orders and proclamations under the Act must be laid before parliament.

Peace Society, The. See ARBITRATION, INTERNATIONAL.

Peacock, Mr. Richard, M.P., Gorton Hall, near Manchester, b. 1820. J.P. for Lancashire. Successor of the late Mr. Charles Beyer, Gorton Lane Foundry. Returned in the Liberal interest as member for Gorton Division, South-East Lancashire (1885).

Pearce, Mr. William, M.P., was b. 1835. Chairman of the Guion Line Co. and the Scottish Oriental Steam Shipping Co. Appointed a member of the Royal Commission on Tonnage (1881). He is now engaged both on the Royal Commission on Loss of Life at Sea and that on the Depression of Trade. Returned in the Conservative interest as member for Govan Division, Lanarkshire (1885).

Peasant Revolt, 1381. See LAND QUESTION, THE.

Pease, Mr. Alfred Edward, M.P., of Pinchingthorpe House, Guisborough, Yorkshire, is the son of Sir Joseph Whitwell Pease, M.P. Educated at Cambridge University. He is J.P. for the North Riding of Yorkshire, and a Deputy Commissioner of Lieutenancy for the City of London; Director of Pease and Partners (Limited), and partner in the firm of Messrs. J. and J. W. Pease, bankers. Returned in the Liberal interest as member for York (1885).

Pease, Mr. Henry Fell, M.P., was b. 1838. He is J.P. for Durham and the North Riding, and is connected with the firm of Sir Joseph Whitwell Pease and Co. Mayor of Darlington (1874). Returned in the Liberal interest as member for Cleveland Division, North Riding (1885).

Pease, Sir Joseph Whitwell, M.P., the son of the late Mr. Joseph Pease, of Darlington, M.P. for South Durham (1832-41); was b. 1828. Is a member of Pease and Partners (Limited), and is also a director of the North-Eastern Railway Company, president of the Peace Society, and a J.P. for Durham and the North Riding of Yorkshire. Returned in the Liberal interest for South Durham (1865-85); Barnard Castle Division (1885).

Pedro II. (de Alcantara), Emperor of Brazil; b. 1825, at Rio Janeiro. On the abdication of Dom Pedro I. (his father), in 1831, he succeeded to the throne, but as he was not of age, the affairs of the country were administered by a Council of Regency till 1840. He is

a man of a very high order of intelligence, and well known in Europe, the principal capitals of which he has visited. He has encouraged foreign labour, and his efforts have been crowned with success. The German colony established under his patronage and support on the highlands in the neighbourhood of Rio is in a most flourishing condition. His diplomatic and military relations with the other American governments are very satisfactory and generally successful; and he was foremost in bringing about the breakdown of the power of Lopez (1866-70), the tyrannical ruler of Paraguay. In 1862 Dom Pedro's government became involved in difficulties with the government of Great Britain, but the case having been submitted to the King of the Belgians for arbitration, it was settled amicably. His Majesty has done a great deal to develop the material resources of his country, which has prospered much under his rule. In 1843 he married the Princess Theresa Christina Maria, sister of Francis I., King of Naples. Dom Pedro is a lineal descendant of the Houses of Braganza, Bourbon, and Hapsburg. The Emperor of Brazil is a corresponding member of the navigation and geographical section of the Paris Académie des Sciences.

Peel, The Rt. Hon. Mr. Arthur Wellesley, M.P., P.C., Speaker of the Commons, youngest son of the late Rt. Hon. Sir Robert Peel, was b. 1829. Educated at Eton and Balliol Coll., Oxford (graduated M.A.). Has held the following official appointments:—Parliamentary Secretary to the Poor Law Board (1868-71); Parliamentary Secretary to the Board of Trade (1871-73); Patronage Secretary to the Treasury (1873-74); Under-Secretary for the Home Department (1880). He is Deputy Lieutenant and J.P. for Warwickshire and Bedfordshire. Returned in the Liberal interest as member for Warwick (1865-85); re-elected for Warwick and Leamington 1885.

Peel, The Rt. Hon. Sir Robert, Bart., M.P., P.C., G.C.B., eldest son of Sir Robert Peel, was b. 1822. Educated at Harrow and Ch. Ch., Oxford, where he graduated. Has held the following official appointments:—Attaché to the British Embassy at Madrid (1844-46); Secretary of British Legation, Switzerland, and Chargé d'Affaires at Berne (1846); Lord of the Admiralty (1853-57); Secretary to the Special Mission to Russia at the coronation of Alexander (1856); Lord of the Privy Council (1861); Chief Secretary for Ireland (1861-65); created G.C.B. (1866). Was for some time Capt. in the Staffs. Yeo. Cav. Deputy Lieutenant and J.P. for Staffordshire and Warwickshire. He married (1856) Lady Emily Hay, daughter of the Marquis of Tweeddale. Returned in the Conservative interest as member for Tamworth (1850-80); Huntingdon (1884); Blackburn (1885).

Peers, English, Deceased, 1885—Mar. 1886. See OBITUARY, APPENDIX.

Peers, Privileges of. See PRIVILEGES OF PEERS.

Pelly, Major-General Sir Lewis, M.P., K.C.B., K.C.S.I., son of the late Mr. John Hinde Pelly, of Hyde House, Gloucestershire, was b. 1825. Educated at Rugby. Entered the army when fifteen years of age. Appointed *attaché* to Sir James Outram (1851); has served many years in India and Afghanistan. Returned in the Conservative interest as member for North Hackney (1885).

Pembroke, George Robert Charles Herbert, 13th Earl of (creat. 1551; b. 1850, and succeeded his father in the Herbert barony 1861, and his uncle in the earldom of Pembroke, etc., 1862. Was Parliamentary Under-Secretary for War (Feb. 1874 to May 1875). The 1st Earl was an adherent of the House of York. The present peer's father was a well-known minister, for many years Secretary-at-War.

Penang. See COOLIE.

"Pennisins, Arthur." See NOMS DE PLUME.

"Pendragon." See NOMS DE PLUME.

Penjdeh. See MERV.

Penny and Halfpenny Stamp, New Proposed. This proposed new stamp, the suggestion of Mr. C. B. Hamers, managing director of the Medical Battery Co. Limited, 52, New Oxford Street, W., is in form and size similar to the penny stamp at present in use, but differs in that it is perforated diagonally, and can conveniently and expeditiously be divided into two equal parts, each of which would constitute the proposed new halfpenny stamp.

Penny Stamp Slips. See POST OFFICE LIFE INSURANCE AND ANNUITIES.

Penrhyn, Edward Gordon Douglas-Pennant, 1st Baron (creat. 1866; b. 1800. Was M.P. for Carnarvonshire (1841-66), when he was created a peer.

Pensions, Civil List. See CIVIL LIST.

Pentads. See MONAD.

Pentaur, Psalm of. See EGYPTOLOGY.

Penzance, James Plaisted Wilde, P.C., 1st Baron (creat. 1869), was b. 1816.

Peppercorn Rent. A rent of one peppercorn a year—in other words, a nominal rent to be paid on demand. It is an expedient for securing an acknowledgment of the tenancy in cases where lands or houses are let virtually free of rent.

Peptone is the product of the digestion of albuminoid substances. Peptonised meat is prepared by artificially digesting lean meat in fresh gastric juice, straining, neutralising by carbonate of soda, evaporating and preserving by addition of glycerine and perchloride of iron or some other preservative. It is readily assimilated by the intestinal mucous membrane, and is exceedingly useful in those cases where nourishment has to be given by enemata.

Percy, Lord Algernon Malcolm Arthur, M.P., P.C., M.A., son of Algernon, sixth Duke of Northumberland, was b. 1851. Educated at Eton and Ch. Ch., Oxford. Late lieut. and adjutant Grenadier Guards. Major 3rd Battn. Princess of Wales's (Berkshire) Regt. (1881). Married (1880) Lady Victoria Frederica Carolina, eldest daughter of William, fourth Earl of Mount-Edgcombe. J.P. for Surrey. Returned in the Conservative interest as member for Westminster (1882-85); St. George, Hanover Square (1885).

Pericles. See DEMOCRACY.

Perigenesia. See HEREDITY.

Periodicals. See NEWSPAPERS.

Periodicity, Mendelejeff's Law of. See CHEMISTRY.

"Periwinkle, Paul." See NOMS DE PLUME.

Permanent Standing Army. See ARMY.

Permian. See GEOLOGY.

Permissive Bill, The. See LOCAL OPTION.

Perry, Sir Erskine. See WOMEN'S RIGHTS.

Persia (Iran). A rapidly decaying state, south-west of Asia, between Russia and India.

Pop. 6,000,000 to 7,000,000. Formerly it was a point of English policy to sustain and develop Persia, and a certain amount of progress was made; but during the last thirty years no direct effort has been made to improve the country, and for the last fifteen we have practically had no policy at all. As a result, Russia has yearly acquired increased influence at Teheran, and since the conquest of the Turcomans by Skobelev (1882) gave her the means of easily disintegrating at least half of Persia, the Shah has been little more than the nominal ruler. Russia now regards Persia much in the same light as we regard Afghanistan: as a quasi dependency, from which all foreign influence, except her own, is to be excluded. Russian commerce is increasing at a marvellous rate in the Caucasus, and railways are rendering its resources available, while Persia is proportionately decaying nearly everywhere. European nations have very little power to arrest this descent of Persia to the position of a mere khanate, England being the only state really interested in Persia, owing to its proximity to Afghanistan. While the Afghans are generally warlike, and have plenty of mountain strongholds, Persia, for the most part, lies quite open to attack, and the people generally have lapsed into an enervated and apathetic condition, rendering a national rising out of the question. The country is three times as large as France (636,000 square miles), but much of its area consists of desert, dividing one province from another, and rendering them all easy to occupy in detail. The two richest are Azerbaijan, on the west side of the Caspian, and Khorassan, on the east. Their annexation by Russia is simply a question of time, as seen by her recent seizure of the Atak oasis, between Askabad and Sarakhs, and of the district of Old Sarakhs, to which the Shah's title was indisputable. As regards commerce, England controls that passing through the Persian Gulf (annual value about £1,000,000), while Russia enjoys predominance in the Caspian region, more especially since she abolished in 1883 a privilege, previously exercised by Europe, of sending goods in transit free of duty to Persia, across Trans-Caucasia. Russia's commercial superiority in the north of Persia will be still further increased when the Government inaugurates the great annual fair, which it is proposed to establish at Baku, on the model of the one at Nijni Novgorod; and another advance will be made when the Russian railway system, already nearly complete to Baku, is pushed on to Teheran, the capital (pop. 85,000). Persia possesses no fleet, and only a very limited army. Of late years, Austrian and Russian military missions have been employed by the Shah to form an army on the European model, but with very little success, due to Russian intrigue and the weakness of the Teheran government. Persia has no public debt, the revenue always exceeding the expenditure; revenue for 1884-5, £1,613,000; expenditure, £1,548,000. The English are represented at Teheran by an embassy.

Persistence of Certain Low Forms of Life. See ORIGIN OF SPECIES.

Personalty. See LAND QUESTION, THE.

Peru. A republic with a constitution modelled on that of the United States, the legislative power being vested in a Senate elected by the provinces, two delegates from each, and a House of Representatives nomi-

nated by electoral colleges of provinces and parishes, one for every 20,000 inhabitants. Executive in the hands of a President elected for four years. Absolute political but not religious freedom allowed, the constitution prohibiting the public exercise of any but the Roman Catholic religion. Revenue was until recently derived from sale of guano and customs duties; direct taxation did not exist. It is almost impossible to state what is the revenue or expenditure, owing to the anarchy caused by the late war, which was nominally terminated by treaty of October 1883. There is an internal debt of about £11,000,000, and a foreign debt of about £33,000,000, chiefly secured on guano deposits, on which no interest has been paid since 1876, with the exception of a small amount paid to England in 1883, under an arrangement with Chili, which now holds the guano islands, that a percentage of the value of guano deposits should be paid to the bondholders. It is difficult for the same reason to estimate the strength of the army. The navy has practically no existence. The area is 483,847 square miles. The population was in 1876 about 2,700,000, but probably has been much reduced during the war. (For a narrative of the political events between 1870 and 1884, see CHILI).—1885. General Caceres, who had for some time carried on a partisan warfare against the Government, attacked Lima at the end of November 1885. After some fighting between his adherents and those of the President Iglesias, the latter surrendered on the understanding that troops on both sides should retire from Lima, and that a general election should be held and an amnesty proclaimed. December 3rd. Dr. Arenas elected president of Peru.—1886. Elections for office of president have resulted in the return of General Caceres (Mar. 29th). The Legislative Assembly will be opened on June 1st. The prospects are 'favourable for the preservation of peace.

"**Peter.**" See NOMS DE PLUME.

Peterborough, Rt. Rev. William Connor Magee, D.D., 26th Bishop of (founded 1541), son of the late Rev. John Magee, vicar of St. Peter's, Drogheda, and grandson of Archbishop (Magee) of Dublin; b. at Cork 1821. Educated at Trin. Coll., Dublin. Became Hon. Canon of Wells Cathedral, and was created D.D. (1859). Appointed Precentor of Clogher and to the living of Enniskillen (1864), and Dean of Cork (1864). Is author of numerous works. Consecrated Bishop of Peterborough 1868.

Petite Culture, La. See AGRICULTURAL HOLDINGS.

Petition of Rights. See ARMY.

Petitions to Parliament. So many informal petitions are presented to Parliament, that, for the guidance of those who may wish at any time to prepare or subscribe documents of the kind, we print the following regulations compiled from the journals and standing orders of the House of Commons:—Every member presenting a petition to the House must affix his name at the beginning thereof. Every petition must be written, and not printed or lithographed. Every petition must contain a prayer, and must be signed by at least one person, on the skin or sheet on which the petition is written. Every person signing a petition must write his address after his signature, or his signature will not be counted. Every petition must be written in the English

language, or be accompanied by a translation certified by the member who shall present it, and must be signed by the parties whose names are appended thereto, by their names or marks, and by no one else except in case of incapacity by sickness. No letters, affidavits, or other documents may be attached to any petition. No erasures or interlineations may be made in any petition. No reference may be made to any debate in Parliament. No application may be made for any grant of public money except with the consent of the Crown. No application may be made for a charge upon the revenues of India except with the consent of the Crown. All petitions, after they have been ordered to lie upon the table, are referred to the Committee on Public Petitions without any question being put; but if any such petition relate to any matter or subject with respect to which the member presenting it has given notice of a motion, and the said petition has not been ordered to be printed by the Committee, such member may, after notice given, move that such petition be printed with the votes. Every petition offered to be presented to the House should be addressed "To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled."

Petre, Rev. William Joseph Petre, 13th Baron (creat. 1603; b. 1847, and succeeded his father 1884. Is in Holy Orders of the Church of Rome. The 1st Baron represented Essex in parliament. He was only son of Sir William Petre, Secretary of State temp. Henry VIII., Edward VI., Mary, and Elizabeth.

Petroleum Association. See ILLUMINANTS.

Petrology, or the study of rocks, forms an important branch of geological science. Most rocks are aggregates of minerals: e.g., granite is an aggregate of quartz, felspar, and mica. The study of a rock merely with reference to its mineralogical constitution is often termed lithology. Clastic rocks are those which have been formed of detrital matter, such as sandstone, of grains of sand, or a volcanic tuff, of fragments of ejected matter. Some rocks are directly or indirectly of organic origin: coal, for instance, is formed from altered vegetable matter, while chalk is mainly composed of the remains of marine animals. Aqueous rocks have been deposited as sediments from mechanical suspension in water, or as precipitates from a state of chemical solution. They may be argillaceous (clays, shales and slates), or arenaceous (sands and sandstones), or calcareous (limestones). The igneous or massive rocks have resulted from the solidification of molten or partially molten matter. They may be vitreous (as obsidian), or crystalline (as granite). In some cases they have been forced into fissures, and solidified as dykes; in others they have been thrust between strata, forming intrusive sheets; while others again have been erupted through volcanic vents, flowing as lava over the surface of the earth or the bed of the sea. Rocks which have solidified slowly under pressure at great depths, as granite, are termed plutonic. Igneous rocks, whether volcanic or plutonic, have been classed in two groups, according as the proportion of silica is above or below 60 per cent.; the former are termed acid rocks (e.g. granite), and the latter basic rocks (e.g. basalt). Of late years great advance has been made in petrology by the use of the microscope. Dr. O. H. Sorby introduced this

method in 1858; the subject was then elaborated in Germany, mainly by Professor Zirkel; and many improved optical methods of research were introduced by Professor Rosenbusch and others. Sections of rocks for microscopic study are prepared so thin as to be transparent, and their minute structure is deciphered by means of transmitted light, often assisted by the polariscope. The rocks of Britain will be fully described in Mr. J. H. Teall's "**British Petrography**" (1886). For metamorphic rocks see **METAMORPHISM**.

Petty Bag Office. See ROLLS, MASTER OF, and ROLL OF SOLICITORS.

Pewterers, The Worshipful Company of See CITY GUILDS, THE.

"Pfaal, Hans." See NOMS DE PLUME.

Phalansteries. See CO-OPERATIVE (APARTMENT) HOMES.

Phayre, Sir Arthur, formerly Chief Commissioner of British Burmah, d. Dec. 15th, 1885. He was b. in 1812, and in 1828 joined the Bengal army. In 1854 he was appointed Commissioner of Pegu, and subsequently Chief Commissioner of Lower Burmah, which post he filled until 1867. In 1874 he was appointed to the governorship of the Mauritius, from which post he retired in 1878.

"Philip." See IRVING, HENRY.

Philippines. See CAROLINE ISLANDS.

Phillimore, Sir Robert, d. Feb. 4th, 1885. In 1853 he entered the House of Commons as Liberal-Conservative member for Tavistock. In 1855 he was appointed Judge of the Cinque Ports, and in 1862 Advocate-General in the Admiralty; and in 1867 he succeeded Dr. Lushington as Judge of the Admiralty Court. The Judicature Act (1873) transferred the powers of the Admiralty Court to the new High Court of Justice, and Sir Robert Phillimore continued to sit as a Judge of the new Admiralty, Probate, and Divorce Division until March 1883, when he resigned.

"Philomneste." See NOMS DE PLUME.

"Phiz." The name adopted by the late H. K. Browne, the illustrator of Dickens', Lever's, and other works, which have made his name famous.

Phoenicia. See BIBLICAL ARCHÆOLOGY and EGYPTOLOGY.

Phonetic New Testament. See SPELLING REFORM.

Phonograph. This apparatus consists of a telephone mouthpiece, with a steel point attached to the disc, which presses lightly on a strip of tinfoil wound on a metal cylinder, on which a fine spiral groove is cut. This cylinder is caused to revolve on a shaft, working on a bearing of corresponding pitch to that of the spiral groove by a crank, and also to travel horizontally in front of the mouthpiece at a uniform rate. On speaking into the mouthpiece, the steel point vibrates, and indents the moving strip of tinfoil, which thus stores up a permanent record of the sounds spoken into the instrument. These indentations will reproduce sound, if the cylinder be again brought back to its original position, and the steel point of the diaphragm placed on the indentation of the first word. On turning the cylinder at the same uniform rate, the mouthpiece utters the words previously spoken into it. Some sounds are, however, rather indistinctly rendered, so that at present the instrument has no scientific value.

Photogen. See ILLUMINANTS.

Photometry. The name given to the different methods employed for comparing the intensity of two luminous sources. The eye being unable to judge directly the relative intensity of two lights, instruments called photometers are constructed for this purpose. They depend on one or other of the two principles, that the eye can readily distinguish whether two adjacent surfaces are equally illuminated, and whether two contiguous shadows have or have not the same depth. **Bunsen's photometer** is based on the first of these principles, and **Rumford's** on the latter. By photometry the relative illuminating equivalents of various light-producing materials can be compared. The common unit for comparison is the light emitted by a sperm candle burning 120 grains of spermaceti per hour. Other lights are said to have the intensity of so many such candles. Various new standards have been recently devised by Vernon Harcourt, Preece, and others, but results are still returned in candle equivalents. Improved forms of photometers are due to Diddin, Weber, etc., for more easily obtaining the illuminating power produced by coal gas and the electric light.

Photophone. The element selenium is extremely sensitive to the influence of light by modifying its resistance to a current of electricity. Graham Bell and Sumner Tainter use a piece of selenium as a transmitter for a telephonic circuit, and call it a photophone. The rays of light from a thin polished mirror are focussed on the selenium cylinder, and words are spoken at the mirror, which by vibrating alters the amount of light falling on the selenium, and so causes undulating currents to flow through the circuit. A Bell's telephone is used as a receiver. (For construction and use of Bell's telephone see TELEPHONE.)

"Phusin, Kate." See NOMS DE PLUME.

Phylum. See ZOOLOGY.

Physics. See CHEMISTRY.

Pianoforte. As early as 1598, in Italy a keyed instrument is spoken of called *Piano e forte* (soft and loud), because of its presumably improved qualities of expression; but as to what this instrument was, there is no definite information. The first pianoforte in the now accepted sense of the word was made by Bartolommeo Cristofori at Florence, soon after 1700. These instruments were in their nature harpsichords wherein the strings were struck by hammers instead of being plucked by quills. The gap in the framing necessary to let the hammers pass through to strike the strings was a source of great difficulty to the earlier makers, and the blow of the new action necessitated the strings being stouter, and therefore hitched to pins more firmly fixed than by the old harpsichord fashion of driving them into the sound board itself. The difficulty of the great gap being overcome by metal arches supporting the sound board, the pianoforte soon began to displace the harpsichord, which had reigned supreme for over two centuries. In 1726 Silbermann of Freiburg showed the great Bach some pianofortes made on Cristofori's models; but the fact that all the essentials of the pianoforte were present shows clearly that neither he nor Cristofori really in the full sense of the term *invented* the pianoforte. Hitherto there was nothing but the "grand" pianoforte; but in 1760 Friederici of Gera made a smaller instrument played from the side, and bearing the same analogy to the spinet as the grand

pianoforte to the harpsichord. This was called the **square pianoforte**, being oblong in shape, with square corners. Square pianofortes of 1766 exist. In 1777 Mozart played on Stein's pianofortes, and was much pleased with them, though there is no doubt the harpsichord remained his favourite instrument. 1783 marks the next improvement, the addition of loud and soft pedals; and in 1788, Broadwood by dividing the long bridge greatly improved the evenness of tone. In 1796 the same maker increased the scale to six octaves. In 1800 Hawkins made the first upright instrument; and the now almost defunct **Cabinet pianoforte** was invented by Southwell in 1807. Tension bars (Broadwood), upward bearings and celeste pedals (Erard), all appeared in 1808; and five years later Wornum invented the piccolo or **Cottage** upright pianoforte, which eventually drove before it all other forms except the original "grand." The scale of 64 octaves was soon attained; and though Erard made instruments of 7 octaves in 1824, it was long before so extended a scale became general. Now it is practically universal, and instruments of $7\frac{1}{2}$ octaves and even of $7\frac{3}{4}$ octaves have been made; though seven octaves cover as wide a space as the arms can reach with ease. In 1826 Wornum invented the well-known check cottage action, which in some form or other is so commonly used; the Southwell sticker action gradually at last yielding before it even in England, and having for years quite disappeared abroad. Iron frames began with the tubular frame invented by Allen, of Stodart's firm, in 1820, and a complete cast-iron frame was produced by him in 1831. The American Babcock also patented one in 1828. But the iron frame now generally used is more upon the lines of Chickering, the American manufacturer (1840), whose model was improved on by Steinway, the German house, in America. Steinway and Chickering brought to perfection a clever arrangement for a doubly oblique crossed stringing, at once giving longer strings and balancing the tension on the frame. This valuable invention has been very usually adopted; but it has its demerits, and a great many English makers now prefer to return to the direct stringing. The use of an iron frame in one casting is quite universal. No high-class pianoforte can withstand the present strain without it, or some still more costly system of framing to replace it. The last attempt of any importance to improve the pianoforte consists in the effort to prolong the tone by the **Organo-piano** and **Melo-piano**, etc., where a rattle is kept up by small hammers continually striking the strings in a quick tremolando; but the effect, though pleasing for a moment, quickly becomes wearisome. Another method is to couple an American-organ with a pianoforte on the same keyboard, as in the "orchestral pianoforte," etc. This, though more successful than the last, is often not quite satisfactory, as the tones are so separate in quality that they do not completely blend. A fortune awaits the fortunate inventor who solves this problem.

Platti, Alfredo. Distinguished violoncello player, and composer of much graceful instrumental and vocal music; b. at Bergamo, N. Italy, 1822. His father was a musician of the town orchestra. Platti began to play at the age of seven. When ten years old he studied under Merighi in Milan. He came to London in 1844, playing at a concert at which Mendels-

sohn also appeared. He rapidly acquired public notice, settled in England, and became principal violoncello at the opera, under Costa, and at the Monday and Saturday Popular Concerts—a position he has held since their foundation, 1859.

Pic du Midi. See BEN NEVIS OBSERVATORY.
Pickard, Mr. Benjamin, M.P., was b. at Kippax, near Leeds. He is secretary to the Yorkshire Miners' Union, and a member of the Wakefield School Board. Returned in the Liberal interest as member for Normanton Division, West Riding (1885).

Pickersgill, Mr. E. H., M.P., was b. 1850. Educated at York grammar school and Univ. of London. Called to the bar at the Inner Temple (1884). Held an appointment in the Post Office (1868). Returned in the Liberal interest as member for South-West Bethnal Green (1885).

"**Picketing.**" See TRADES UNION.

Picton, Mr. James Allanson, M.P., son of Sir James A. Picton, J.P., of Liverpool, was b. 1832. Educated at the Liverpool Institute, the Lancashire Independent Coll., Owens Coll., Manchester, and London Univ., where he graduated M.A. Formerly an Independent minister at Cheetham, Leicester. Member of the first London School Board. Returned in the Liberal interest as member for Leicester (1885).

Pierre Savorquan (Count de Brazza) is a member of an old Italian family, and joined the French navy during the time Rome was occupied by the French. He distinguished himself at an early date, when in Algeria, by taking dispatches, disguised as an Arab, from one body of French troops to another, across a country full of hostile natives. He served for some time in the South Atlantic squadron, and succeeded the Marquis de Compiègne in charge of the exploration of the Oussai in 1876. Since that time he has been almost uninterruptedly engaged in the work of exploring the upper basin of that river, and the country lying between it and the Congo. In this work he was at first but poorly supported by the French government and public, and drew largely on his own private resources and those of his family. He often pushed on actually alone and unattended into unknown countries, by his tact and good method of dealing with the natives. His work has not been properly understood in England, where he has often been represented as a mere adventurer and manufacturer of bogus treaties with native chiefs; whilst all his work has been done as the commissioned officer of the French government, and the agreements he has entered into on behalf of his employers have been most thoroughly explained to the other contracting parties. He has opened up an important trade route to the Upper Congo, and France has through his labours acquired a large increase of her African possessions. He has received the *grande médaille d'or* of the French Geographical Society, and also the Cross of the Legion of Honour, the Italian order of the Crown of Italy, etc.

Pike's Peak. See BEN NEVIS OBSERVATORY.
Pilkington, Mr. George Augustus, M.P., son of Mr. R. G. Coombe, of Burnham, Essex, was b. at Upwell, Cambridgeshire, 1848. Educated at Guy's Hospital. Mayor of Southport (1844-45). Returned in the Liberal interest as member for Southport Division of South-West Lancashire (1885).

Pinches, Mr. See ASSYRIOLOGY and BIBLICAL ARCHEOLOGY.

"Pindar, Paul." See NOMS DE PLUME.

Pipe Roll Society. Established 1883, for the publication of the Pipe Rolls, or Great Rolls of the Exchequer, which are preserved in the Record Office, and are almost perfect from 2 Henry II. to the present date. They relate to all matters connected with the revenue of the Crown, Crown lands, etc., and are thus of considerable importance for historical and genealogical research.

Pisces. See ZOOLOGY.

Pitch is a musical term defining the acuteness of musical sound; thus a woman's voice is at a higher pitch than a man's. Fortunately pitch is capable of the most exact determination from the nature of musical sound. All sound is produced by vibrations of some medium in contact with the drum of the ear—that is, speaking generally, by vibrations of the air. Anything that sets the air into vibration—a clap of the hands, a cart bumping along the stones, the firing of a pistol, etc.—produces noise or sound. If this vibration is continued at the same rate for an appreciable time, so that the rate is recognisable by the ear, it is felt as a musical tone of a definite pitch, the slower vibrations producing tones of low pitch, the quicker vibrations yielding tones of high pitch. A series of regular puffs of air, or of taps on a hard body, or the scratching of a quill along the rim of a rotating toothed wheel, etc.—in fact, anything that gives noises of any character whatever at regular and quickly-recurring intervals—produces musical tone; and such easily measurable tone-producers are in fact used by theorists to calculate the rapidity of vibration necessary to produce a tone of a certain pitch. Next comes the question what this rapidity shall be. We call the notes of our scale C D E F G A B C (see SCALE), and if the pitch of any C is determined, the pitch of all other notes is determined. For let 240 vibrations produce a certain C, then by the constitution of music the C an octave below will be produced by 120, and the C an octave above by 480 vibrations, and that whether it be a vibrating tongue of metal (harmonium), a vibrating string (violin, pianoforte, etc.), a vibrating column of air (organ, trumpet, etc.), or a vibrating membrane (drum), which first sets the air in motion. Each of these tone-sources vibrating at the given rate will differ in quality of tone, but be exactly alike in pitch. Further (see SCALE), if C is given by 240, D next above it is given by 270, E by 300 vibrations per second, or vibrations at that rate for part of a second,—and so with the rest of the notes. Manifestly, therefore, it is necessary to fix the exact pitch of C. The inconvenience of not doing so was apparent in the dark ages, when the pitch of the church and of the concert-room differed by the interval of a fourth, and music written for the one could not be sung in the other. In the seventeenth century a mean pitch was agreed to between these two; and itself evidently a return to the earliest pitch known in music, because the lowest note for ordinary bass singers was G in the earliest times, and this was also given by the mean pitch. This pitch averaged 508 vibrations per second for pitch C' (pitch C' being the C of the third space in the treble staff), and varied 7 or 8 vibrations per second one way or the other. As a difference of 33 vibrations gives a semitone rise in pitch at this point in

the scale, the extreme range was only a quarter of a tone during the reign of the mean pitch: and this happy period lasted from Handel and Bach's time to Mozart and Beethoven's, and even to the beginning of Mendelssohn and Rossini's. But with the growth of instrumental music the pitch rapidly rose: the wind instruments were sharpened, and the strings followed them. By 1834 the pitch was manifestly sharp, and opera singers began to complain when they had to sing older music a quarter of a tone higher than it was written. In this year, therefore, a congress was held at Stuttgart; and at the recommendation of Scheibler, a great authority on the subject, the C' was fixed at 528 vibrations a second. Scheibler's pitch not being universally adopted, the French musicians next took their turn, and they fixed a normal pitch (Diapason normal, or French pitch) at C' = 522 vibrations a second. This was compulsorily at once adopted all over France, and is followed by many other nations. Our English musicians came next, in 1869, with a congress led by the Society of Arts. The Society of Arts pitch is the Scheibler pitch of C' = 528. Meanwhile the opera band and other orchestras kept on rising a trifle every year, until now the *philharmonic* or *opera pitch* (sometimes called *concert pitch*) is as high as C' = 540, a full semitone above the pitch of Mendelssohn's youth! The pitch of military bands in Germany (judging by those who played at the last International Exhibition) is the same as that of English military bands—viz. the *Kneller Hall pitch*, where C' = 543. Seeing that one pitch out of all these must be chosen sooner or later, why should we not return boldly to the old mean pitch? There would be this striking advantage: the number 512 is the ninth power of 2; therefore nine octaves below a C' of 512 vibrations, and far beyond the limit to the powers of the ear, would lie a theoretical CCCCCC = 1. The ear can actually hear the fifth octave above this, namely CC = 32; and that is its lowest limit, slower vibrations being only sensible, not audible. But such a series of sounds starting from 1 gives a real and philosophical basis for sound, easy in calculation, and, as we have seen, ancient in practice; it may be called the *philosophical pitch*. Many musicians are earnest for its adoption. It would be a quarter of a tone beneath Society of Arts pitch and half a tone beneath *philharmonic* pitch.

Pitt-Lewis, Mr. George, M.P., Q.C., was b. 1845. He was educated as a solicitor, but subsequently (1870) was called to the bar. Created Q.C. (1885). Returned in the Liberal interest as member for Barnstaple (1885).

Planet, Intra-Mercurial. See ASTRONOMY.

Plasterers, The Worshipful Company of. See CITY GUILDS, THE.

Plato. See EGYPTOLOGY.

Playfair Commission, 1874. See CIVIL SERVICE.

Playfair, Sir Lyon, M.P., P.C., K.C.B., F.R.S., LL.D., was b. 1819; son of Dr. George Playfair, Inspector-General of Hospitals, Bengal. Educated at St. Andrews and Edinburgh. He has held the following official appointments: Government Inspector-General of Schools and Museums of Science and Art (1853-58); Postmaster-General (1873-74); Commander of the French Légion d'Honneur; Chairman of Ways and Means, and Deputy Speaker of the House of Commons (1880-83). He was Professor of

Chemistry at Edin. Univ. (1859-69). Vice-President of the Committee of Council on Education in the present Gladstone administration (Feb. 1886). Returned in the Liberal interest as member for the University of Edinburgh and St. Andrews (1868-85); South Leeds (1885).

Pleistocene. See GEOLOGY.

Pliocene. See GEOLOGY.

Plumbers, The Worshipful Company of See CITY GUILDS, THE.

Plum Trees and Bushes. See FRUIT FARMING.

Plunket, Most Rev. William Conyngham **Plunket** 4th Baron (creat. 1827); b. 1828, and succeeded his father 1871. Elected Bishop of Meath (Oct. 1876); translated to the **Archbishopric of Dublin** (1884). The first peer was so created on being appointed Chief Justice of the Common Pleas in Ireland, and was afterwards for eleven years Lord Chancellor of Ireland.

Plunket, The Rt. Hon. David Robert, P.C., Q.C., M.P., was b. 1838. Educated at Trinity Coll., Dublin. Called to the Irish bar (1862); Q.C. (1868); Law Adviser to the Irish Government (1868); Solicitor-General for Ireland (1875-77); H.M. Paymaster-General (1880). First Commissioner of Works (1885). Returned in the Conservative interest as member for Dublin University (1870-85); re-elected 1885.

"Plymley, Peter." See NOMS DE PLUME.

Plymouth. See MARINE BIOLOGICAL LABORATORIES.

Pneumatic Tubes. The telegraphic system in London is greatly aided by the use of pneumatic tubes. The Central Telegraph Office at St. Martin's-le-Grand now possesses thirty-three tubes, which come in from the outside to the great central hall on the ground floor of the General Post Office West, which formerly belonged to the Receiver and Accountant General's office. Two systems of pneumatic tubes are now in use in the postal telegraph service: namely, that of **Mr. Latimer Clark**, which was used for some time before the transfer of the telegraphs, by the Electric and International Telegraph Company; and the newer system of **Messrs. Siemens and Halske** of London and Berlin. The tubes, which are composed of lead, run in all directions in the E.C. and W.C. districts; and the stations therein are connected by a double tube, which forms a complete circuit, and has a column of air always passing through it, and which is moved either by pressure or by vacuum or by both: the diameter of the tube is three inches. The double tube was well compared by the late Mr. Scudamore, C.B., to a pneumatic railway having an "up" and "down" line, and being worked on the railway block system, for which purpose it is fitted with **Tyer's patent train-signalling apparatus**. The up and down lines may be opened through their entire length, or may be blocked by switch boxes at an intermediate station. The terminal stations can send carriers to be stopped by the switch box at an intermediate station; and the intermediate station, when it knows a through carrier to be coming for one of the termini, can, if it happen to have any messages of its own for that terminus, switch out the through carrier, insert its own messages, and send on the carrier again without appreciable delay. The tube being of large size, the carriers are proportionately large, and each will hold about fifty messages. When pressure and vacuum

are employed the distance between the General Post Office and Charing Cross is traversed in about four minutes; when vacuum alone is employed, about five minutes are required for the transmission. When the tube is working within its power, it is stated to be able to do the work that would fully occupy six wires and twelve clerks. The air for use in the pipes is pumped into a reservoir by two fifty-horse power engines on the ground floor of the new General Post Office. There is another engine on the same floor which is kept at rest in reserve for the same purpose. The steam for these engines is furnished by four huge Galloway boilers in the basement of the building. The pneumatic tube system has also been extended to some of the larger provincial towns, such as Liverpool, Manchester, Birmingham, Glasgow, and Dublin.

Poaching. See GAME LAWS.

Poetical and Prophetical Books. See REVERSED BIBLE, THE.

Poet Laureate, is an office in the household of the sovereigns of Great Britain, the appellation having its origin in a custom of the English Universities, which continued to 1512, of presenting a laurel leaf to graduates in rhetoric and versification, the king's "laureate" being a graduated rhetorician in the service of the king. The first appointment of a poet laureate dates from the reign of Edward IV., the first patent being granted in 1630. It was formerly the duty of the poet laureate to write an ode on the birthday of the monarch, but this custom has been discontinued since the reign of George III. Amongst those who have held this office may be mentioned Dryden, Southey, Wordsworth, etc. **Baron Tennyson** is the present Poet Laureate (appointed 1850).

Poltovin, Madame. See BALLOONING.

"Polaris" The. See ARCTIC EXPLORATION.

Polariscope. An instrument for converting ordinary into polarised light by causing the vibrations of the ether to take place in one direction instead of in many. This polarisation of light can be brought about by reflexion from a mirror placed at a critical angle, or by double reflexion in certain crystals, such as those of Iceland spar. **Nicol's prism** consists of such a crystal of Iceland spar, and can be used for producing polarised light. Polarised light is examined by means of an instrument called an analyser, and this can be a second Nicol's prism placed at right angles to the first. The field of view is then perfectly dark, but on rotating either the analyser or polariser more and more light passes through, until the two prisms have their axes parallel. On further rotation the light begins to wane, until, when the instrument has been rotated through two quadrants, the field is again black. Certain organic liquids and solutions have the property of rotating the plane of polarised light. Dextrose, one of the sugars, for example, rotates the plane to the right; levulose, another of the sugars, to the left. Ordinary cane sugar can, by boiling with weak acid, be converted into "invert" sugar, which has also this property. **Polariscopes**, or **saccharimeters** as they are then called, are therefore of much use in determining the amount of sugar in a syrup or crude sample. The instruments used differ somewhat in their constructions; the most important are those due to Mitscherlich and Wild, and the half-shade instruments of Jellet, Cornu and Laurent. For saccharimetry the **Soleil-Ventzke-Scheibler**

and the Soleil-Duboscq instruments are specially adapted. This method of analysis is also useful for determining the amount of milk-sugar in milk, and in the valuation of the cinchona alkaloids (quinine, cinchonine, etc.) in the various barks. Landolt's "Handbook of the Polariscopes" may be consulted by those who wish for a detailed account of the subject.

Poles, Legislation. See AUSTRIAN POLITICAL PARTIES.

Political Economy may be shortly defined as the Science of Wealth. Such definition, however, needs some explanation, as many misconceptions have existed as to the nature of wealth, and the limits of the term have hardly been quite clearly decided, even amongst economists. **Wealth** may be taken to include the sum total of all things which are (1) transferable; (2) difficult to obtain; and (3) useful, in the sense of procuring a pleasure or preventing a pain. Thus, political economy will be a science which deals with such things, and with man in his social aspect, so far as he occupies himself with their pursuit. Now, a thing can only be of *use* in the above sense if it satisfies some human want. Human want and its supply will thus constitute the leading thought in the science of political economy; and the prominence of this idea has prompted one eminent French economist, M. Courcelle-Seneuil, to define economy as the science of the effort to supply human want. Previous to the writings of Adam Smith, political economy can hardly be said to have existed as a systematic science at all. Detached portions of subjects which are now included within its scope had been treated with great ability, and some success—e.g., the exposition of the true nature of Money given by Aristotle in "Politics," Bk. I. But, in modern times, before Adam Smith, such economy as was written consisted rather of a body of practical rules than of reasoned scientific truth. And these rules were framed in accordance with the commercial or mercantile system, of which Thomas Mun, in his "England's Treasure by Foreign Trade," posthumously published in 1664, was the leading exponent. This system held that the acquisition of the precious metals should be taken as at once the aim of a foreign trade and the measure of its success. Adam Smith himself was educated in the economic school of Quesnay, the most important name amongst the French Economistes, or Physiocrats, whose teaching was afterwards described by Smith himself as the "Agricultural System," from its leading doctrine that it was only in agriculture that real production could take place, all other labour being merely occupied in adjusting pre-existing materials. In 1767 Sir James Stewart published his "Political Economy," and had he been able to see through the errors of the mercantile system, he would have had a claim to be considered the father of the science. That claim, however, must, as it is, be allowed to Adam Smith, who published his "Inquiry into the Nature and Causes of the Wealth of Nations" in 1776. Rarely, if ever, has genius achieved a triumph so complete. When he commenced to write it was one against the world, and the one was victorious. Since his day some inevitable errors of his have been set right, and many acute intellects have developed and systematised the science in innumerable directions; but the influence of the mind of Adam Smith will remain as long as

any can be found to construe the English tongue. David Ricardo, the first edition of whose "Principles of Economy and Taxation" was published in 1817, may be regarded as marking the next epoch in the history of the science; and the majority of economists still adhere to his explanation of many portions of economic theory, notably that concerned with rent; the "Ricardo theory of Rent," though not first announced, having been certainly first popularised, by him. James Mill and John Stuart Mill may both be described as belonging to the Ricardian school of economics, though the fame of the latter has overshadowed that of his teacher. "The Principles of Political Economy," by J. S. Mill, still remains, in spite of being on some points superseded, the best complete treatise on the subject. Of late there has been somewhat of a revolt from the Ricardian school of economics—largely, perhaps, on account of the prominence assigned by that school to the doctrine of *laissez-faire* (q.v.). Of this revolt the late Prof. W. S. Jevons may be regarded as the most distinguished leader; but it may be doubted whether this later movement will have further result than the re-stating and more careful defence of many of the positions laid down by the Ricardian school; a task which has recently been performed with great ability by Prof. Sidgwick of Cambridge, in his "Principles of Political Economy." The chief divisions of political economy are: I. Production; II. Distribution; III. Exchange; and IV. Functions of Government—this last belonging rather to applied than to pure economics. I. PRODUCTION. This portion of the science is intended to supply a complete answer from the theoretical side to the question "How are things made?" Economy has no concern with the details of any special production; these belong to the particular art concerned. Economy will only inquire, e.g., how cloth is made, so far as is helpful in framing general propositions as to how things generally are best adapted to human ends. There are certain "requisites of production," without which no production could take place. These are generally enumerated as follows: (i) **Labour**; (ii) **Capital**; (iii) **Land**. Labour, or human exertion for a human end, has for its function to arrange things in their proper places. It cannot be too clearly understood that labour can create nothing, but can only arrange pre-existing material in the position wherein it is qualified to satisfy human wants. But the results of any but the simplest and rudest labour arrive so slowly that labour could not wait for their completion, were it not aided by a stock of available useful things, the result of previous labour. And such a stock, destined to be consumed in the production of fresh wealth, and consisting of food, clothing, shelter, tools, and materials, is called Capital. The ultimate source of all production is land, in some form.—Many tasks, if not most, are soon found to be beyond the individual man's unaided strength. Thus, men, very early in the history of the race, find the necessity for CO-OPERATION, whereof there are three degrees recognised: (1) **Simple co-operation**, where many men unite to do the same thing, as in raising a heavy weight; (2) **Complex co-operation**, or separation of employments, the certain sign that economic civilisation has begun, where many men are united to do different things; and (3) **Division of Labour**, where many are united to do different parts of

the same thing. And for purposes of production, the commodities thus made by labour may be divided into two great classes: *first*, those which it becomes easier and easier to make the larger the quantity made (such as watches), and which are said to be produced under the law of increasing return; and, *secondly*, those which it gets harder and harder to obtain the larger the quantity wanted (such as corn), and which are therefore said to be produced under the law of diminishing return. These are two central laws of political economy.—The second division of the subject, DISTRIBUTION, is intended to reply to the question. "Who is to have the made things?" Since, in passing from Production to Distribution we pass from matters of natural law to those of human arrangement, it is obvious that answers can be framed to this question which shall convey fundamentally different ideas of the most desirable constitution for society. Thus, to this question **Socialism** formulates the reply, "All of us"; **Communism** goes one step further, and answers, "All of us *alike*"; while **Individualism** declares that those shall possess the made things who either made them themselves or procured them by free arrangement, without force or fraud, from those who did make them. Hitherto societies have decided in favour of Individualism, and those who contribute the three elements of production are the classes among whom the produce is divided; the labourer being remunerated by Wages, the capitalist by Profits, and the landlord by Rent. For each of these three shares economists endeavour to investigate a law.—The third division of political economy treats of EXCHANGE. Before any exchange can take place, two difficulties must be got over: first, the difficulty arising from non-mutuality of want and supply *e.g.*, A may want what B has, but B may not want what A has. And even supposing this to be overcome, there would still remain the difficulty of knowing how much of *x* for a given quantity of *y*; or in other words, we want a measure of the value of the articles which it is proposed to exchange. To meet this, civilisation has early contrived that a third commodity should be chosen by common consent to be a medium of exchange and a measure of value between any and every other pair of commodities. And to this third commodity has been given the name of MONEY. In its entirety the theory of exchange is extremely complex, and includes the most difficult investigations in the science, such as those of foreign trade, etc.—In the fourth place, economics are usually held to include the investigation of such questions as the proper FUNCTIONS of GOVERNMENT. Here, however, economy ceases to be a pure science, and more nearly resembles an art. In this division are discussed such questions as whether any given function is better performed by government or by private enterprise; and how the means may best be obtained wherewith the government shall defray the expenses of such functions as it may be decided to leave in its hands; thus including the whole of the wide field of taxation and finance. In this department the tendency of English thinkers has, until lately, been to restrict the interferences of government within the narrowest possible limits—a tendency which found its most triumphant expression in the overthrow of Protection. But within the last few years a considerable reaction has set in against this non-interference view, and the cry for more

and more of government interference seems to daily gather strength. (Those who wish to further investigate this fundamental difference of opinion can hardly do better than consult, on the side of *laissez-faire*, Mr. Herbert Spencer's "The Man *versus* the State," and, on the other side, "The State in relation to Labour," by Prof. Jevons.)

Political Parties, English. For general purposes, the members of the new House of Commons, 670 in number, may be classified under three heads—as **Liberals**, **Conservatives**, and **Parnellites**. The Liberals number 335, the Conservatives 249, and the Parnellites 86. In this computation we have included as Liberals four members who, while professing Liberal sentiments, claim to have been returned as independent politicians, unpledged to any party leader. They are: Mr. Fitzwilliam, Mr. J. Corbett, Mr. Joseph Cowen, and Sir Edward Watkin. In the Liberal total are also comprehended a number of members who for certain subsidiary purposes form separate parties, such as the twelve Labour representatives, the advocates of Church Disestablishment, and the five gentlemen returned by Scotch constituencies specially to watch over the interests of the Highland Crofters. The Liberals, again, may be subdivided into two principal sections: *i.e.*, the **Whigs** or **Moderates**, of whom the Marquis of Hartington is regarded as the head; and the **Radicals**, or **Advanced Reformers**, led by Mr. Chamberlain, Sir C. Dilke, and Mr. J. Morley. Hitherto both these sections have found it possible to co-operate under the guidance of Mr. Gladstone, still the acknowledged chief of the party as a whole. It cannot be denied, however, that the lines of divergence between the two extremes threaten to become more pronounced in the future, and to lead to the formation of new political combinations. At the general election the Whig or moderate Liberal candidates were in several instances opposed by Radical candidates. The most conspicuous success of the latter was obtained in Cornwall, where Mr. Conybeare defeated Mr. A. P. Vivian. The **Conservatives**, or as they are sometimes called **Tories**, or **Constitutionalists** (*q.v.*), form a more homogeneous party than their Liberal opponents, having fewer and less conspicuous internal divisions. Their professed policy is the maintenance of the Empire at all cost, the preservation of the constitution as represented by the three estates of Crown, Lords, and Commons, the union of Church and State, and the upholding of the rights of property. Subject to these principles, the Conservatives claim to be as well disposed towards useful legislation and the reform of abuses as any other party in the state. Indeed, in the late Parliament, a small section of Conservatives led by Lord Randolph Churchill (*q.v.*), and known as the **Fourth Party**, endeavoured to rival the Liberals in their support of popular measures. The principal members of the Fourth Party have now been absorbed in the Conservative administration. The Liberals base their claim to public support on the superiority of their legislation, the greater purity of their administration, and their devotion to the principles of peace, retrenchment and reform. They are divided in opinion as to the maintenance of the State Church and the House of Lords, and as to the granting of an Irish Parliament. The demand for the latter constitutes the sole programme of the Parnellite party, who treat every other political

question as of subordinate importance. The party is a development of what was formerly known as the **Home Rule Party** (see **HOME RULE**), led by the late **Mr. Isaac Butt**, and subsequently by **Mr. Shaw**, and whose purpose, never very clearly defined, was believed to be the establishment of a very liberal form of local self-government in Ireland. **Mr. Parnell**, who first entered the House of Commons in 1875, disapproved the parliamentary methods of **Mr. Butt** and **Mr. Shaw**, and his policy of greater activity and boldness gradually attracted the support of the Irish constituencies until he became the accepted leader of the people. The **Moderate Home Rule party** has been completely effaced in Ireland, and the members returned are so distinctly pledged to obey **Mr. Parnell's** commands, that they have come to be spoken of as **Parnellites**, though they describe themselves as the **Irish Nationalist party**. In England the Liberal and Conservative strength is almost equal, the Liberals having a majority of 26. In Scotland and Wales the Liberals greatly preponderate, numbering 89 as against 13 Conservatives. The remarkable thing about the state of parties is that Ireland, whilst sending 18 Conservatives, does not return a single Liberal; the remaining 85 seats being filled by Nationalists. The latter party also hold one seat in Great Britain—viz. the Scotland Division of Liverpool, represented by **Mr. Thomas Power O'Connor** (*q.v.*). Nominally, as the outcome of the general election the Liberals in the House of Commons are in a majority of 86 over the Conservatives, and just equal in numbers to Conservatives and Nationalists combined. In the House of Lords there are only two parties—**Liberals**, mostly of the Whig or moderate class; and **Conservatives**. The latter, whose leader is the **Marquis of Salisbury** (*q.v.*), the late Prime Minister, are in a large majority. The derivation of the names by which the two great English parties are still frequently described has been explained by the late Lord Macaulay in the following passage:—"It is a curious circumstance that one of these nicknames was of Scotch and the other of Irish origin. Both in Scotland and in Ireland misgovernment had called into existence bands of desperate men whose ferocity was heightened by religious enthusiasm. In Scotland some of the persecuted Covenanters, driven mad by oppression, had lately (1679) murdered the Primate, had taken arms against the government, had obtained some advantages against the king's forces, and had not been put down till Monmouth, at the head of some troops from England, had routed them at Bothwell Bridge. These zealots were most numerous among the rustics of the western lowlands, who were vulgarly called Whigs. Thus the appellation of Whig was fastened on the Presbyterian zealots of Scotland, and was transferred to those English politicians who showed a disposition to oppose the Court and to treat Protestant Nonconformists with indulgence. The bogs of Ireland, at the same time, afforded a refuge to Popish outlaws, much resembling those who were afterwards known as **Whiteboys**. These men were then called Tories. The name of Tory was therefore given to Englishmen who refused to concur in excluding a Roman Catholic prince from the throne." (For special analyses of the parties see APPENDIX.)

Pollock, Mr. Walter Herries, was b. 1850. Educated at Eton, and Trin. Coll., Cambridge, where he took classical honours (1871). Called to the bar at the Inner Temple (1874). After having been some time on the staff, **Mr. Pollock** became editor of the *Saturday Review* (1883).

Poltimore, Augustus Frederick George Warwick Bampfylde, P.C., and Baron (creat. 1831); b. 1837, and succeeded his father 1858 Was Treasurer of the Queen's Household (March 1872 to Jan. 1874).

Polwarth, Walter Hugh Hepburne-Scott, 6th Baron (creat. 1690); b. 1838; succeeded his father 1867. Elected a representative peer for Scotland (1882).

Polygamy. See MORMONISM.

Polynesia. A term used to indicate the countless islands of the Pacific Ocean, extending between Asia, the Asiatic archipelago, and Australia on the west, and America on the east. On the N.W. the principal groups are the Bonin Islands, Ladrone Islands, Marshall Islands, Gilbert Islands, nominally Spanish; and the Caroline and Pelew Islands, Spanish and German. South of these is the large island of New Guinea or Papua, now divided between Holland, England, and Germany; the Bismarck Islands, German; Louisiade Islands, English; Solomon Islands, and New Hebrides, native; Loyalty Islands and New Caledonia, French; Kermadec Islands, Norfolk Island, and New Zealand, British. Extending eastward between the equator and 30° S. lat., are the Fiji Islands, British; Tonga or Friendly Islands, British protectorate; Navigators' or Samoa Islands, Cook's Islands, and Austral Islands, native; Society Islands, French; Marquesas Islands, Low and Paumotu archipelago, etc., native; recent French protectorate. In 20° N. lat. are the Sandwich Islands, independent. England established a Western Pacific Commission in 1877, under the Governor of Fiji (officials to reside in Samoa, Tonga, New Britain, etc.). Suffered to lapse by succeeding government. Larger islands of volcanic origin, smaller formed on coral reef. Former often mountainous and well timbered. Climates mostly delightful, and soils wonderfully fertile. Among productions are sandal-wood, ebony, tamanu wood, bêche-de-mer, pearl-shell, pearls, cocoa-nut, bread-fruit, pandanus fibre. Besides these are many articles introduced—cotton, coffee, etc. (see FIJI). Traders established in most groups, and frequent intercourse with English colonies, America, and China. Papuan or Negrito race found as far east as Fiji, where it mixes with pure Polynesian or Maori race. Sandwich Islands, Tonga, Samoa, and Cook's Islands have well organised native governments, are Christian and partly civilised. In some others there is still much barbarism. Polynesian character usually open, friendly, docile, but rather idle. Negritos of Solomon Islands, Bismarck Islands, etc., fierce, intractable savages. (Consult Wallace's "Australasia," Cooper's "Coral Lands.")

Polyzoa. See ZOOLOGY.

Pomfret, Mr. William, M.P., of Godinton Park, Ashford, was b. 1828. Educated at Shrewsbury and Tonbridge. Is senior partner in the Ashford Bank, and J.P. for Kent. Returned in the Conservative interest as member for South Kent (1885).

Ponsonby of Sysonby, Baron. See BESSBOROUGH.

Poor-Law. The English poor-law is con-

tained in many statutes, the earliest being that of the 43rd year of Elizabeth, and in innumerable reported cases. But the modern system of poor-relief was established by the **Poor-Law Amendment Act of 1834**. Under this Act the parishes which had formerly been areas for poor-law purposes were grouped into unions, a market town being generally taken for the centre. There are in England and Wales 617 unions, with an average population of 45,000 each. But they vary extremely in size, and the West Derby Union in Lancashire contains 120 times as many people as are contained in the Hoo Union in Kent. Within each union was established a board of guardians, consisting firstly of all county justices residing within the union, who have seats *ex officio*; and secondly of guardians elected by the several parishes of the union. The parishes differ much in size, and small parishes may be grouped for representation, but every parish of 300 inhabitants must have at least one representative. The electors in each parish are the owners and ratepayers. In either character an elector may have any number of plural votes not exceeding six, one vote for every £50 rating; so that the maximum number of votes which can be given by any one person is twelve. The qualification of a guardian is fixed in each case by the Local Government Board, but must not exceed £40 rating. The elections take place every April, the term of office being annual. A board of guardians has usually a clerk, a treasurer, registrars of births and deaths, medical, vaccination, workhouse, and relieving officers. They may employ paid valuers and collectors, and form committees of their own number for the relief of the poor in the different parts of the union. All boards of guardians are largely controlled by the Local Government Board, which by its general orders regulates the mode of their election, their procedure, their finance, and their administrative methods, whilst by its special orders it compels observance of the law in particular cases. The expenses of poor-relief are defrayed out of the poor-rate levied in each union upon a special valuation. A valuation list is prepared by the overseers of each parish, and after publication is sent to the assessment committee of the guardians, who must hear objections. After altering the list as they think proper the committee approve and sign it. From the decision of the committee there is an appeal to quarter sessions. In the year 1882-3 rather more than £14,000,000 was raised by rates levied on the basis of the poor-law valuation, but of this total only £8,353,000 was spent in the relief of the poor. Relief is either indoor or outdoor relief. The former is the relief given in the workhouse, and coupled with the obligation of labour for the able-bodied. The latter is the relief given in money, medicine, etc., to people living in their own homes. The number of persons receiving relief has diminished of late years, partly because of the greater strictness in granting outdoor relief. The total of persons receiving relief at the present time is about one-thirtieth of the whole population of England and Wales. The cost of relief has, however, steadily increased of late. Beside the administration of poor-relief other important functions under the Public Health Acts, the Elementary Education Acts, and many other Acts, have been assigned to the guardians of the poor. But these functions are more properly noticed under other titles.

Pope, The. His Highness Leo XIII., the 258th Roman Pontiff, son of Count Ludovico Pecci, was b. at Carpineto, 1810. Educated at the Jesuit Coll. of Viterbo (1818-24). Entered the School of Collegio Romano (1824), where he greatly distinguished himself, and proceeded to the College of Noble Ecclesiastics. Having become a Doctor of Laws, he was made by Pope Gregory XVI. Referendary of the Segnatura (1837). Took holy orders, and was consecrated priest (1837) by Cardinal Carlo Odescalchi. The title of Prothonotary Apostolic was bestowed on him by Pope Gregory, who also appointed him Apostolic delegate in succession at Benevento, Perugia, and Spoleto. Was sent as nuncio to Belgium (1843), and created shortly after Archbishop of Damietta, nominated Bishop of Perugia (1846); created cardinal (1877). Elected Pope Feb. 20th, 1878, and took the title of Leo XIII. Among the events of his Holiness' reign may be mentioned the restoration of the hierarchy in Scotland, the contest with Germany, the Kulturkampf, and the now famous Falk Laws, the *rapprochement* with Prince Bismarck, on whom the Pope conferred the decoration of the Order of Christ (December 31st, 1885),—this *entente cordiale* being, however, to some extent interrupted by the recent amendment to the Ecclesiastical Bill by Dr. Kopp (March 1886). Pope Leo was selected by Germany and Spain as arbiter in the Caroline Islands dispute (1885).

Poor Law Amendment Acts, 1834-45-47. See PAUPERISM.

Poor Law Board. See LOCAL GOVERNMENT BOARD.

Poor Rates. See PAUPERISM.

Popo, Great, and Little. See TOGO-LAND

Porifera. See ZOOLOGY.

Portarlington, Henry John Reuben Dawson-Damer, K.P. 3rd Earl of (creat. 1795); was b. 1822; succeeded his uncle in 1845. Elected an Irish representative peer (1855). The family originally descended from the Dawsons of Spalding, Yorkshire, settled in Ireland in the reign of Charles II.

Port Hamilton. This station of the British navy consists of three small islands situated about forty miles south of Corea (*q.v.*), commanding the straits of that name which lead from the China Seas to the Japanese Sea. The largest island, **Sodo**, is $3\frac{1}{2}$ miles long by a mile broad, and towers to a height of 650 feet; **Sunhodo**, the next in size, has only half the area, the highest point being 780 feet; the third, **Observatory Island**, is still smaller. The three enclose a harbour two miles long by a mile broad, and from nine to twelve fathoms in depth. The population in all is about 2,000, who follow agricultural pursuits. Considering the fact that Corea, with its population of over 10,500,000, is closed to foreign commerce, except at the three ports of Fu-san, Gen-san, and Nin-sen, and that the group of islands in question both commands the straits, and is available as a coaling station, the possession of Port Hamilton is considered to be of much importance. During the dispute with Russia in 1885 an ironclad was sent to the Port by England, which caused certain explanations; and it was suggested that the Government of the Czar desired if possible to annex the group, in view of Russian interests on the Siberian side of the empire.

Portland, William John Arthur Charles James Cavendish Bentinck, 6th Duke of

(creat. 1716); was b. 1857; succeeded his kinsman 1870. The first peer's father was Bentinck, Heer Van Dipenham in Overysse; the son came to England with William III., and distinguished himself at the Battle of the Boyne. The third Duke was a well-known minister in the reign of George III.

Portman, Edward Berkeley Portman, 1st Visct. (creat. 1873), son of E. B. Portman, Esq., of Bryanston, and Orchard Portman; b. 1799; represented Dorset in parliament for ten years, and was M.P. for Marylebone (Jan. to March 1833). This family, of considerable antiquity, is descended from Sir William Portman, Lord Chief Justice of England *temp.* Henry VIII.

Portman, Hon. Edwin Berkeley, M.P., the second son of Viscount Portman, was b. 1830. Educated at Rugby and Balliol College, Oxford. Elected Fellow of All Souls'. Called to the bar at the Inner Temple (1852). Returned in the Liberal interest as member for North Dorset (1885).

Porto Franco, of Batoum. See BATOUM.

Porto Rico. See SPAIN.

Porto Seguro. See TOGO-LAND.

Port Philip Settlement. See VICTORIA.

Portsmouth, Isaac Newton Wallop, 5th Earl of (creat. 1743); b. 1825; succeeded his father 1854; hereditary bailiff of Burley in the New Forest. This family is stated to have been seated in Hants at a period antecedent to the Conquest; and several of its members sat in the House of Commons *temp.* Charles I. and II. The 2nd Earl's maternal grandmother was niece and co-heir of the celebrated Sir Isaac Newton.

Portugal. Kingdom under Louis I. of the House of Braganza. Constitution of 1826 (amended in 1852) recognises four powers—the legislative, executive, judicial, and moderating—the last being vested in a hereditary king. Two legislative chambers, the Peers and the Deputies, collectively called the Cortes. The peers, unlimited in number, are nominated by the Crown for life. The deputies are directly elected for four years by all registered citizens, twenty-one years of age, who can read and write, and possess an annual income of £22. Madeira and the Azores are included politically in the mother country. The Cortes meet at specified periods, without intervention of the king, who has no veto on a law twice passed. State religion is Roman Catholic; all others are tolerated. Annual revenue, on budget 1885-86, £6,972,998; expenditure, £8,495,300. Debt, funded and floating (in 1884) £109,500,000. Army, about 35,000 in peace, 120,000 in war. Navy, one ironclad and 42 vessels of other kinds. Area, 36,510 square miles. Pop. 4,160,000. Colonies: Cape de Verde Islands; territories in Senegambia, Angola, Mozambique, etc., in Africa; Goa and Diu in India, Macao in China.—1870. A military insurrection, headed by Saldanha, in May, seizes royal palace, forms new ministry. Outbreak in Oporto and Lisbon in August against him. Neutrality in Franco-German war observed, and republic recognised. House of Peers reconstructed, hereditary succession abolished, and nomination by Crown substituted. Saldanha ministry succeeded by that of Bishop of Vizeu in October, by Marquis D'Avila in Jan. 1870, and by De Millo in Sept. In June 1872 disastrous fire in Lisbon. In August great military conspiracy against government discovered. Great financial crisis and suspension of banks in Portugal in Aug. 1876. Duke of Saldanha died in November. De Millo ministry resigns

in March 1877. Succeeded by D'Avila, who, on vote of censure in Jan. 1878, resigned in favour of De Millo.—1879. On the discussion of the budget the ministry resigned, and were succeeded by Braamcamp, the head of the Progressists, and commissions to investigate and report on the public service appointed. Treaty with Great Britain involving customs' union and railways in India ratified. Major Serpa Pinto crossed Africa from Benguela to D'Urban.—1880. Discussions on treaty with England as to Delagoa Bay, giving the latter free passage to her troops, and authorising cruisers to enter Portuguese waters for suppression of slave trade. In 1881 further proposed that said treaty should endure for twelve years only. Agitation arose against the treaty ostensibly, but really against the excise upon provisions, and conflict with police in Lisbon. Ministry thereupon resigned; succeeded by Sampaio cabinet; dissolution of Cortes in June. Taxes for new fiscal year levied by royal decree. Elections (in August) resulted as usual in success of government. On an alleged arrangement with Spain to secure armed intervention in case of insurrection in return for customs' unions, etc., the premier resigned, and was succeeded by De Millo. Commercial treaty with France concluded.—1882. Visit of King and Queen of Spain to Lisbon, January. Indemnity bill in respect of taxation levied in previous year passed. Treaty as to Delagoa Bay postponed in consequence of Transvaal war.—1883. Visit of King and Queen to King of Spain (June), and of Queen and Crown Prince to King of Italy in July.—1884. Reform and Elections bill brought in previous session passed by both Houses. Treaty with England concluded (February) as to Portuguese sovereignty on west coast of Africa and navigation of Zambesi and Congo, but subsequently allowed to drop on European Conference deciding that the navigation of Congo should be regulated by an International Commission (which met in March 1885, when the claim to the north bank of the Congo was given up, and a portion only of the south bank retained). A protectorate over Dahomey was proclaimed in October, and the town of Whyduh also annexed. Death of the late King Ferdinand in December.—1886. March 19th, a ministerial crisis occurred. Senhor Mello the Premier and the cabinet resigned, being succeeded by Senhor Luciano de Castro as Premier and Minister of the Interior.

Postal Congresses. See POSTAL UNION, THE.

Postal Orders. First brought into operation on January 1st, 1881. The system was devised and introduced by the late Mr. George Chetwynd, C.B., who was Receiver and Accountant General to the Post Office, and has proved extremely successful. Postal orders, which are issued for fixed amounts only, differ from money orders in that no letter of advice is used, and they are sold to the public in much the same manner as postage stamps. The purchaser is required to fill in the name of the payee before parting with the order; and he can, if he likes, also insert the name of a particular money order office at which the order is to be paid, but if he does not do so the payee can obtain payment at any money order office on presentation, providing he signs the receipt at the foot of the order and inserts the name of the paying office in the proper place. Postal orders can be crossed, when they

will become payable only to a banker. These orders must be cashed within three months from the last day of the month of issue, and after the expiration of such period they will only be paid on payment of an extra poundage equal to the amount of the original poundage for every three months, or portion of that period, after the first three months from the month of issue have elapsed. Postal orders can be purchased at any post-office at which money order business is transacted during the hours when the office is open (on week days) for the sale of stamps; and, under a recent special arrangement, they can also be purchased at some of the smaller post-offices which are not money-order offices. Fourteen denominations of postal orders are issued, on which poundage is charged as follows:—

Amount of order.	Poundage.	Amount of order.	Poundage.
1s.	3d.	4s. 6d.	1d.
1s. 6d.	3d.	5s.	1d.
2s.	1d.	7s. 6d.	1d.
2s. 6d.	1d.	10s.	1d.
3s.	1d.	10s. 6d.	1d.
3s. 6d.	1d.	15s.	1½d.
4s.	1d.	20s.	1½d.

Broken amounts are allowed to be made up by the use of not more than five penny postage stamps, which should be affixed to the face of the order. Postal orders are also issued in India, Gibraltar, Malta, Constantinople, Hungary, and many of the colonies. Like money orders, when a postal order is once paid the Post Office is not liable for any further claim that may be made in respect of it. The total number of postal orders paid during the year ended March 31st, 1885, was 18,831,164, amounting in value to £7,885,347. The denominations which appear to be most used by the public are 1s., 1s. 6d., 2s. 6d., 5s., 10s., and 20s. It is useful to keep a record of the serial number of a postal order before sending it away, as, in case of loss or accidental destruction, such information greatly facilitates any inquiry which may be made respecting such order with the view to a duplicate being issued. The postal order system is under the direction of the Receiver and Accountant General of the Post Office, and a large staff of lady clerks (*q.v.*) is employed upon the work at headquarters.

Postal Telegraph Department. The electric telegraphs of the country were taken over from the various private companies by the Government, February 1870, since which date there has been a marvellous development of the system. The transfer was accompanied by many advantages, which the public have long since learnt to appreciate. Chief amongst these was the reduced and uniform tariff and the general extension of the system. The newspaper press also derived from the change material benefits, which have tended considerably towards the development and success of that important factor in the modern social system. The rates for press messages are still 1s. for every 100 words transmitted between 6 p.m. and 9 a.m., and 1s. for every 75 words between 9 a.m. and 6 p.m. to a single address, with an additional charge of 2d. for every 100 words, or 75 words as the case may be, of the same telegraphic communication so transmitted to every additional address. The rate at first adopted was 1s. for every 20 words or fraction thereof; but that rate has recently been reduced

to ½d. a word, including addresses, with a minimum charge of 6d. for the first 12 words (see SIXPENNY TELEGRAMS). The number of Postal Telegraph Offices throughout the country is now over 6,000, and most of these offices (except the receiving offices in London and other large towns), are open on week-days from 8 a.m. to 8 p.m. Postmasters may, however, accept telegrams after the usual hours on the payment of certain fees, provided the terminal office is open, or its attention can be gained. Telegrams, too, can be handed to rural postmen on their way to telegraph offices. The total number of messages forwarded from telegraph offices in the United Kingdom during the year ended March 31st, 1885, was 33,278,459, and the total gross revenue for the same year was £1,784,419. A very large staff of telegraphists is employed throughout the country, and 1,850 persons are employed in the Central Telegraph Office alone, which occupies the greater portion of the new General Post Office in St. Martin's-le-Grand. The whole of the third and fourth floors, a great part of the second floor, and the large hall on the ground floor, are now devoted to the business of the telegraph department. The instruments chiefly in use are the **Morse Sounder**, **Wheatstone's automatic**, and the **Hughes type-printer**. The third floor is devoted to the provincial circuits and the fourth floor to metropolitan circuits. The daily scene at the Central Telegraph Office is really one of the sights of London. The submarine cables belong to private companies, but foreign telegrams are of course received at any postal telegraph station. The chief regulations for foreign telegrams are founded upon the **International Telegraph Convention**, according to which regulations foreign telegrams are divided into three classes—viz., ordinary, code, and cypher. European code telegrams may be sent in any of the languages in use in Europe; or Latin may be employed; but no such telegram may contain words of more than one language. Cypher telegrams must be composed exclusively of figures, or of letters. The length allowed for a single word is, in European telegrams fifteen letters, and in extra-European telegrams ten letters. Fresh regulations in respect of foreign telegrams were framed at the **International Telegraph Conference** recently held at Berlin, which will come into operation on July 1st, 1886, and will have the effect of reducing in some cases the existing tariffs, and, to a certain extent, of making the tariff uniform as regards certain countries. It should be added that, as regards both inland and foreign telegrams, any person may register an abbreviated or arbitrary address on payment of a fee of one guinea a year, dating from the day of registration. The address must consist of not less than two words, one of which must be the town or place of delivery.

Postal Union. The, established July 1st, 1875, being the result of a Postal Congress held at Bern, at the invitation of the German Government, in the month of September 1874. At that Congress a draft article of treaty to establish a General Postal Union was discussed by representatives from all the states of Europe, as well as from Egypt and the United States of America. The treaty was concluded and signed on October 9th, by all except France—who, however, joined at a subsequent meeting, on the stipulation that while the treaty should take effect in other countries on July 1st, 1875, it should not come

into operation in France until January 1st, 1875. The adoption of the plan of a **General Postal Union** has, as need scarcely be said, been fraught with great benefits to the commercial world, as well as to the public generally of the countries and states which have entered into the Union; while it has also afforded to the various Governments concerned the advantage of simplifying the method of accounting between the various states affected. The principle recognised under the treaty of the Union is, briefly, that each country or state retains the postage on all outward correspondence. There are, of course, rules affecting transit rates, etc., which do not, however, call for explanation here. The Bureau of the International Postal Union is located in Berne, from which office a very interesting journal is issued every month, containing articles and notices of postal matters in all countries, printed in French, German, and English. A **Postal Congress**, to discuss points and to consider propositions affecting the Union, assembles once every five years, at which delegates from all the states concerned meet. The last Congress was held at Lisbon in the early part of 1885. The countries comprised within the General Postal Union are divided into two classes—namely, A and B—and will be found printed in the "Post Office Guide," as also in the new "Penny Post Office Handbook." Under class A the rates are—for letters $\frac{1}{4}$ d. per half-ounce, for post-cards $\frac{1}{4}$ d., for newspapers or packets of printed paper $\frac{1}{4}$ d. per 2 oz., and for patterns $\frac{1}{4}$ d. per 4 oz. Under class B the rates for letters are—for countries not printed in *italics*, and for Hong Kong, Japan, and New Caledonia, *via* San Francisco, $\frac{1}{4}$ d. per half-ounce; for post-cards $\frac{1}{4}$ d., newspapers $\frac{1}{4}$ d. per 4 oz.; for printed matter $\frac{1}{4}$ d. per 2 oz. Commercial papers same as for printed matter, except that the lowest charge is for each packet $\frac{1}{4}$ d. in all cases; patterns are the same as printed matter, $\frac{1}{4}$ d. per 2 oz. For countries under class B, printed in *italics*, the rates are—Letters, $\frac{1}{4}$ d.; post-cards, $\frac{1}{4}$ d.; newspapers, $\frac{1}{4}$ d. per 4 oz.; printed papers, $\frac{1}{4}$ d. per 2 oz. The fee for registration under both classes is $\frac{1}{4}$ d. Unpaid letters addressed to or received from countries in the Postal Union are charged double the prepaid rate, and those partially prepaid are charged with double the deficiency. No letter for a colony or foreign country may exceed 2 feet in length or 1 foot in width or depth.

Post Meridiem. See PRIME MERIDIAN AND UNIVERSAL DAY.

Post Office. One of the finest institutions of this country, and probably the best regulated service in the world. Prior to 1683 the postal system was very crude and badly administered. In that year one Robert Murray, an upholsterer, established, with great success, a penny post in London, which afterwards passed to William Docwray, a name well known in postal history, under whose management the undertaking became so valuable that the Government, becoming alarmed, viewed it as an invasion of the legal rights of the Crown, and applied to the Court of King's Bench, which decreed that the undertaking should be "handed over to and remain the property of the royal establishment." In 1720 Ralph Allen of Bath (the original of Squire Allworthy in "Tom Jones") inaugurated his successful system of cross posts. The medium of transmitting post letters at this period and long after was of

course by waggons, stage coaches, and mail coaches; and it was not until some time after the advent of steam as a means of locomotion that anything like rapidity in transit was achieved. The year 1840 is the great landmark in postal history, when the late Sir R. Hill introduced penny postage. Since that date the postage rates have been low and uniform, while the progress of the service has been extraordinary. The annual number of letters, postcards, book-packets, and newspapers is at the rate of two millions, giving an average of over fifty-five to each person. Of this number 12,000,000 are registered letters. There are 33,000 receptacles of all sorts for letters throughout the United Kingdom, of which 16,500 are post-offices, where postal business generally is transacted. The General Post Office, London, is situated in St. Martin's-le-Grand, and comprises two large and handsome buildings, which are occupied by a portion of the administrative staff, by the Central Telegraph and the Circulation Offices. A large proportion of the staff occupy, from want of room in the General Post Office, premises rented in various parts of the Metropolis. A new General Post Office is about to be built, which will occupy the ground from the present General Post Office West to the Money Order Office. The General Post Offices in Edinburgh and Dublin are located in large and handsome buildings, and many of the provincial towns possess handsome post offices. The permanent Post Office staff numbers over 48,000 persons, of whom 3,000 are females. There are, besides, about 47,000 employed in the provinces, who are not on the permanent staff. The Postmaster-General is the parliamentary head of the Post Office; and the secretary, Mr. S. A. Blackwood, C.B., is the permanent chief. There are also a financial secretary, four under-secretaries, and many other functionaries of high rank. The gross revenue derived from letter postage in the year 1884-5 was £7,629,820. During the past forty years the Post Office has acquired many other branches of business besides letter-carrying, which will be found treated separately.

Post Office Life Insurance and Annuities. This system was first instituted in the year 1805, and was worked in the Receiver and Accountant General's department of the Post Office. Although never an actual financial failure, the scheme, for various reasons, did not prove so successful as was anticipated; and when the late Mr. Fawcett became Postmaster-General he soon decided that some reform was necessary for the purpose of extending the utility of the system. Many suggestions were put forward, but the only scheme which met with Mr. Fawcett's approbation was one devised and proposed by Mr. James J. Gardin, the present Receiver and Accountant General of the Post Office, which scheme is now in operation. All persons insuring their lives or purchasing annuities become, if not already so, savings bank depositors. Their premiums are payable through the medium of their savings bank accounts, and are deducted, without any trouble to them, from the money they may from time to time deposit in the bank, which money can always be increased by deposits of not less than one shilling at any post office savings bank, while by the use of the **Penny Stamp Slips** provision can be made in sums of one penny at a time. The interest accruing on money de-

posited, or the dividend on Government Stock purchased through the Post Office, may, if desired, be applied either to the purchase of an annuity or to the payment of the premium on a policy of insurance, thus leaving the capital untouched. Persons of either sex may insure their lives with the Post Office for any amount not less than £5 or more than £100, the limits of age being at the maximum sixty-five years, and fourteen years at the minimum, or eight years if the amount does not exceed £5. **Immediate or deferred annuities** are also granted to any person not under five years of age for any amount not less than £1 or more than £100. Deferred annuities are granted either with or without the return of the purchase money. Husband and wife may each be insured to the full amount of £100, or purchase an annuity of £100. A statement giving full particulars of age must be furnished on a form, which will be supplied by the postmaster with the form of proposal by persons desirous of insuring their lives or of purchasing annuities; and if such statement can be verified by the Registrar-General no further evidence of age is required; but if not, proposers have to provide at their own cost such certificates of birth or baptism or other evidence of age as may be required of them. Insurances for sums not exceeding £35 are granted without medical examination; but in such cases, if the insurer die before the second premium becomes payable, only the amount of the first premium will be paid to his representatives, and if he die after the payment of the second and before the third premium becomes payable, only half the amount insured will be paid to his representatives. In either case, if it can be proved to the satisfaction of the Postmaster-General that the death of the insured person was caused by accident, the full amount will be paid. The premiums charged for life insurance in the Post Office vary with the ages of the persons insuring, and with the mode in which they are to be paid. The sums charged for the purchase of immediate and deferred annuities vary with the age and sex of the purchasers, and in the case of deferred annuities, with the number of years which are to pass before the commencement of the annuity, and with the conditions as to the return or non-return of the purchase money. A life policy may be surrendered after two years' premiums have been paid. Insurers not under sixteen years' of age may nominate a person to whom the money due at death is to be paid. The form of nomination, with full instructions as to filling it up, can be obtained, on application, from the Savings Bank Department. Insurers and annuitants in the Post Office have, of course, direct Government security for the payment of the money at the proper time. Proposal forms for life insurance and for the purchase of annuities, together with the necessary information as to filling them up, can be obtained at any post office savings bank, where also the tables of premiums to be charged may be seen or purchased. Information on any other point can be had on application to the Savings Bank department, to which the Post Office system of life insurance and annuities is now attached.

Post Office Savings Banks. Instituted in the year 1861, with the object of enabling the public to deposit and withdraw their savings, within prescribed limits, at any post office in the United Kingdom at which money-order

business is transacted. The total number of such offices is now not far short of 8,000. The savings bank scheme was devised and organized by the late **Mr. George Chetwynd, C.B.**, who became the first controller of the Post Office Savings Banks. At these banks, deposits of one shilling, or any number of shillings, are received, subject to the limits of £30 in one year, ending December 31st, and £150 in all, exclusive of interest. Pennies may be saved by using one of the well-known penny postage stamp savings slips, invented by the late **Mr. Chetwynd**; and when twelve penny stamps have been affixed to one of these slips, which can be obtained at any post office, they will be accepted by the Post Office as a shilling deposit, provided they have not been in any way defaced or damaged. Interest at the rate of £2 10s. per cent. per annum is allowed, until the sum due to a depositor amounts to £200, when interest ceases to be allowed until the balance has been reduced. The interest is added to the principal on December 31st in each year. Every deposit is, in addition to the entry made in the deposit book, acknowledged from the Chief Office in London. When a depositor wishes to withdraw the whole, or any part of his savings, he must apply on a printed notice of withdrawal form, which can be obtained at any post office savings bank, and forward that form to the Chief Office, London, in return for which he will receive a warrant for the amount required by him, payable at the post office savings bank named by him in his withdrawal notice. A depositor may add to his deposits, or may withdraw his money, at any post office savings bank in the United Kingdom without change of deposit book. Depositors can become holders of **Government Stock** through the medium of the Post Office Savings Bank. This extremely useful and beneficial scheme was one of the measures introduced by the late **Mr. Fawcett**, when he was Postmaster-General, and first came into operation in the year 1882. Not less than £10, or the amount of the current price of £10 stock, can be purchased at one time, and not more than £100 stock can be held by the depositor in any year ending December 31st, or £300 stock in all. For the purpose of these investments, deposits may be made to an amount not exceeding the value of £100 stock and the commission in any year ending December 31st. These sums are of course irrespective of the limits of ordinary deposits, so that a post office savings bank depositor may actually have an aggregate of £500 standing to the credit of his account. Purchases and sales of stock are effected at the current price of the day; while stock certificates, with coupons annexed, can be obtained in exchange for stock. Depositors in the post office savings banks who are over sixteen years of age may nominate a person or persons to receive any sum not exceeding £100, which may be due to the depositor at the time of his death. The total amount due to depositors in the post office savings banks on December 31st, 1884 (latest return), was £44,773,773, exclusive of Government Stock held by depositors at the close of the year, which amounted to nearly £2,000,000. The number of deposits in the year 1884 was 6,458,707, and the amount £14,510,411; and the withdrawals numbered 2,198,792, and amounted to £12,530,563. The amount of interest credited to depositors was £1,025,117.

Potash Phosphate Manures. See MANURES.
"Potential." See ELECTRICITY.

Potential Energy. See ENERGY, LAWS OF.

Potter, Mr. Thos. Bayley, M.P., was b. 1817. Educated at Rugby and Univ. Coll., London. Formerly a merchant at Manchester. Deputy Lieutenant and J.P. for Lancashire and Manchester. Hon. Secretary of the Cobden Club. President of the Union and Emancipation Society during the late war in the United States. Returned in the Liberal interest as member for Rochdale (1865-85); re-elected 1885.

Poulett, William Henry Poulett, 6th Earl of (creat. 1706); was b. 1827; succeeded his father 1864. The 1st Baron was distinguished in the Royal cause during the civil wars; the 1st Earl was one of the commissioners for the Treaty of Union with Scotland (1706).

Poulsters, The Worshipful Company of. See CITY GUILDS.

Powell, Mr. Francis Sharp, M.P., of Cambridge Square, Hyde Park, and Horton Old Hall, was b. 1827. Educated at St. John's Coll., Cambridge, taking classical and mathematical honours (1850), besides being elected a Fellow of his College. Called to the bar at the Inner Temple (1853). Is a J.P. for Lancashire and the West Riding. Returned in the Conservative interest as member for Wigan (1857-59); Cambridge (1863-68); Northern Div. West Riding (1872-74); re-elected for Wigan 1885.

Powell, Mr. Walter, M.P. See BALLOONING.

Powell, Mr. Walter Rice Howell, M.P., of Maesgwynne, Whitland, Carmarthenshire, was b. 1810, and graduated at Christ Church, Oxford. He is a Deputy Lieutenant for Pembroke and Carmarthen, and J.P. for Cardiganshire; High Sheriff for Carmarthen (1849). Returned in the Liberal interest as member for Carmarthenshire (1880-85); re-elected 1885.

Power, Mr. Patrick Joseph, M.P., was b. 1850. Educated at Stonyhurst. He is J.P. for Waterford, and Chairman of the Waterford Board of Guardians. Returned as a Nationalist for Co. Waterford (1884-85); East Waterford (1885).

Power, Mr. Richard, M.P., was b. 1851. Returned as a Nationalist for Waterford City (1874-85); re-elected 1885.

Powerscourt, Mervyn Wingfield, K.P., 7th Visct. (creat. 1743); Baron Powerscourt (1885), by which last title he holds his seat in the House of Lords; was b. 1836; succeeded his father 1844; was elected an Irish representative peer (Dec. 1865). This family is said to have been seated at Wingfield in Suffolk antecedent to the Conquest.

Powis, Edward James Herbert, D.C.L., 3rd Earl of (creat. 1804); was b. 1818; succeeded his father 1848. Was M.P. for the northern division of Montgomeryshire (1843-48). The present peer's great-grandfather, a distinguished military commander, obtained the barony of Clive.

Prado. See CAROLINE ISLANDS.

Prayer-Book Revision. From the reign of Henry VIII. to Charles II. the history of the Prayer-Book is a series of revisions. In 1662 the present Book of Common Prayer came out. But Protestants have never been quite satisfied with it. Tillotson, Stillingfleet, Beveridge, Tenison, and others, advocated revision, while many bishops of the present century have done the same. A revised Prayer-Book was published in the reign of William III., but it never received

the sanction of parliament. On the lines of this Prayer-Book the first revision in the present century was brought out by the Convocation of the Free Church of England. This was followed by one by the Prayer-book Revision Society; the Reformed Episcopal Church of America published another, and the English branch of the same body another; and one has been published in Dublin, and proposed for the use of the disestablished Irish Church. But they are all defective, either from want of completeness of revision on the one hand, or, on the other, from too radical a change in the general construction of the Book. The **Prayer Book Revision Society** (Pres., Lord Ebury) was formed to correct the Book of Common Prayer, and make it, as asserted, more in accordance with the teaching of the Reformation.

Pre-Cambrian. See GEOLOGY.

Pre-historic. See GEOLOGY.

Prendergast, Major-Gen. Sir Harry North Dalrymple, R.E., V.C., K.C.B., the conqueror of Upper Burmah, is an experienced officer in Eastern warfare. He was present with the Madras Sappers and Miners during the Persian campaign in 1857, and took part in the bombardment of Mohumrah. He also served with the Malwa field force; gained his brevet-majority at Calpee, and the Victoria Cross at Mundisore by attacking a *velaitee*, who had levelled his musket at a brother officer, receiving the contents of the piece in his own body. In the Abyssinian expedition (1867), Prendergast was field engineer commanding his old contingent the Madras Sappers and Miners, and was present at the fall of Magdala. Appointed honorary A.D.C. to the Marquis of Ripon (Viceroy of India) 1880-2; commanded a brigade in Madras (1882-3), and a division from 1883. Last autumn (1885), when it was decided to prepare an expedition to Upper Burmah, should the ultimatum which had been sent to King Thee Baw prove abortive, Major-Gen. Prendergast was appointed to the command. This, his last campaign, was remarkable for the celerity with which the operations were carried out. The Viceroy of India (Lord Dufferin) evidently calculated upon the reply to be received from the king, and the concentration and movement of troops began in India immediately after the despatch of the ultimatum. The last body of the 14,000 men engaged left Calcutta or Madras on November 6th, the King of Burmah's evasive reply was received on the 8th or 9th, and on the latter day the troops were proceeding up the Irrawaddy. The forts at Minhla were carried on the 17th; and after several minor affairs, the force, which had proceeded without a single check, was met on the 26th, near Ava, by a message conveying Thee Baw's submission. Mandalay, the Burmese capital, was entered without opposition on the 28th, the king being taken prisoner. For his brilliant services in this affair, Major-Gen. Prendergast received the honour of knighthood and the thanks of the Queen. He retired from his command March 31st, 1886. See also BURMAH, and THEE BAW.)

"Prendergast, Paul." See NOMS DE PLUME.

Pre-Raphaelite Brotherhood, The. A body of artists, poets, and literary men who combined together to advocate in theory and follow out in practice certain novel theories of art, the subsequent success and influence of which was largely owing to the support they received from the powerful pen of Mr. Ruskin. The original members of this Society were

Mr. William Holman Hunt, artist, Mr. John Everett Millais, R.A., Mr. Dante Gabriel Rossetti, artist and poet, Mr. Thomas Woolner, R.A., sculptor, Mr. James Collinson, artist, Mr. Frederick George Stevens, artist and critic, and Mr. William Michael Rossetti (brother of D. G. Rossetti), literary critic and writer. The object of these gentlemen briefly was to effect a practical revolution in art by insisting upon a direct moral purpose in all paintings, and also on the necessity for the most microscopic minuteness of detail possible, and the most faithfully accurate reproduction of nature. Realistic, but at the same time reverent, truthfulness was in fact what they aimed at. The name *Pre-Raphaelite* was adopted because they looked upon Raphael "as the first traitor to religious art," since he idealised his creations past recognition, and was the founder of what they deemed the illusory style. The Pre-Raphaelite Brotherhood has long since died a natural death, and the only surviving member of it who has consistently adhered to its principles is Mr. Holman Hunt; but its followers have been and still are many, while its influence upon English art has certainly been both widespread and lasting.

Presbyterianism is church government by presbyters, and by presbyters only. The session of a Presbyterian church consists of the ordained ruling elders, and the pastor of the church, who always presides; and in case of a church being vacant the pastor of some other church within the bounds of the presbytery is chosen (Moderator) to preside. The **presbytery** consists of the pastors of churches, and a ruling elder from each congregation within prescribed boundaries. The **Synod** consists of presbyteries within a larger area; and the **General Assembly** takes in the whole Church, and consists either of the pastors of all the churches, together with a ruling elder from each congregation (called a lay elder), or representatives chosen from amongst both pastors and ruling elders. The standards of the Presbyterian body are the Westminster Confession of Faith, with the Catechisms, Larger and Shorter. But the United Presbyterian body in Scotland, and several members of other sections in various places, receive these with an explanation especially in respect to Chapter XXIII. of the "Confession." It is not unlikely that a movement within the Presbyterian Church of England may result in that body making certain provisos as to the wording of certain doctrinal parts. That section called the **Reformed Presbyterian Church** recognises the (morally) binding obligations of the National Covenant of Scotland, and also of the Solemn League and Covenant. With these exceptions the several sections of the Presbyterian Church stand, in respect to the doctrine, worship, discipline, and government of the Church, on a common platform. The **Pan-Presbyterian conferences** recently held have brought the unity of Presbyterians in all parts of the world in essentials clearly to light. Presbyterianism is represented by a steadily increasing body in England—the result of the union in 1876 of the United Presbyterian Synod in England with that of the English Presbyterian Church, under the title of the Presbyterian Church of England. There is a small number of churches connected with the Established Church of Scotland in England. In Scotland, in addition to the Establishment, there are the

Free Church of Scotland, the United Presbyterian Church, and some smaller bodies. Certain evangelical Christian Churches who do not hold the doctrines of Presbyterianism conduct their ecclesiastical affairs presbyterially. Presbyterianism is represented in Ireland chiefly in the north; and the Welsh Calvinistic Methodists are also Presbyterians. In the United States of America, in Canada, Australia, New Zealand, and wherever Scotch and (Ulster) Irish people settle, Presbyterianism is certain to take root. The body, as a whole, is growing in numbers. The tone of its pulpits is evangelical. Its ministers are well trained. Presbyterians are decided Protestants; and wherever Presbyterianism prevails the tone of Christianity is enlightened, healthy, and pure. For a very long period a Liturgy was unknown amongst Presbyterians; and until lately instrumental music was not allowed in Presbyterian churches. At present there is a slight movement in favour of a Liturgy; and organs have already found their way into many, if not most Presbyterian churches. The **Presbyterian Church of England** consists of 284 fully organised congregations and nine preaching stations, providing accommodation for 145,320 persons, besides a large number of fully equipped mission stations in connection with town congregations, with an average attendance of about 12,000 persons. The number of settled ministers is 261 (some of the congregations being vacant), with 17 ordained missionaries in the foreign field. There are also 13 licentiates, and 30 theological students, preparing for the ministry. The property of the Church is estimated at £1,350,000, exclusive of sundry investments for the endowment of the College and scholarships, for the College itself, for buildings for mission work abroad, and for the Sustentation Fund and other schemes of the Church. Of the existing places of worship 149 have been erected since 1851, their value being estimated at £721,364; 28 of the existing congregations trace back their existence to the seventeenth century, 38 to the eighteenth century. The remaining 218 have been established within the present century. The revival of Presbyterianism in England in the earlier portion of the present century was due to the influence on English Presbyterianism on the one hand of the Evangelical movement in the Established Church of Scotland which led up to the disruption, and on the other of the consolidation of the dissenting Presbyterianism of Scotland which led up to the formation of the United Presbyterian Synod in 1846. The English section of that Synod united with the older Presbyterian body in England in 1876, so forming the Presbyterian Church of England. The total income of the Church in 1884 was £213,202 5s. 7d.—practically about a quarter of a million—£35,000 of the amount being for missionary and other general objects. The backbone of the Church finance is the Sustentation Fund, which since 1878 has secured for the body of the ministers, excluding a limited number under special arrangements, a minimum income of £200. Under this scheme 98 congregations were aid-receiving in 1885 to the amount of £5,409 13s. 11d., as against 103 in 1878 to the amount of £6,443 7s. 6d., the average amount of aid required being at date £55 per congregation, as against £62 10s. in 1878.

Preserved Meats. See MEAT SUPPLY.

Presidents of the United States since the Declaration of Independence, July 4th, 1776.

Washington, Gen. (1st Pres.)	1789 and '93
Adams, John	1797
Jefferson, Thomas	1801 and '5
Madison, James	1809 and '13
Monroe, James	1817 and '21
Adams, John Quincy	1825
Jackson, Gen. Andrew	1829 and '33
Buren, Martin Van	1837
Harrison, Gen. William H. (d. April 4)	1841
Tyler, John (el. as V.-Pres.)	1841
Polk, James Knox	1845
Taylor, Gen. Zachary (d. July 9, '50)	1849
Fillmore, Millard (el. as V.-Pres.)	1850
Pierce, Gen. Franklin	1853
Buchanan, James	1857
Lincoln, Abr. (assas. April 14, '65)	1861 and '5
Johnson, And. (el. as V.-Pres.)	1865
Grant, Gen. U. S. (d. '85)	1869 and '73
Hayes, R. B., after long contest with Tilden	1877
Garfield, Gen. (shot July 2, d. Sept. 19, '81)	1881
Arthur, C. A. (el. as V.-Pres. suc. Sept. 20)	1881
Cleveland, G.	1885

Press Association. See NEWS AGENCIES.
Press Messages. See POSTAL TELEGRAPH DEPARTMENT.

Price, Captain George Edward, R.N., M.P., grandson of the late Sir Rose Price, was b. at Dinan, in France, 1842. Entered the Royal Navy (1855); retired (1873). Returned in the Conservative interest as member for Devonport (1874-85); re-elected 1885.

Price, Mr. Thomas Phillips, M.P., was b. 1844. Educated at Winchester and Univ. Coll., Oxford. Called to the bar at the Inner Temple (1866). Is J.P. for Monmouthshire; High Sheriff of the county (1882). Returned in the Liberal interest as member for North Monmouthshire (1885).

Price-Hughes, Rev. Hugh, M.A., a leading and popular Methodist divine, was b. 1847. Educated at Richmond Theological College and graduated at London Univ. He held appointments at Dover, Brighton, Tottenham, Dulwich, Oxford, and Brixton, where he is at present stationed. Has held the office of secretary to the Temperance Committee of the Wesleyan Conference; one of the editors of the *Methodist Temperance Magazine*; vice-president of the United Kingdom Alliance; editor of the *Methodist Times* (Jan. 1st, 1885).

Priestley, Mr. Briggs, M.P., of Apperley Bridge, near Leeds, was b. 1831. He is member of a firm of worsted manufacturers at Bradford. Returned in the Liberal interest as member for Pudsey Div., West Riding (1885).

Prim, Marshal. See SPAIN.

Primary. See GEOLOGY.

Primitive Methodists. The first church was formed in 1810, and was composed of ten members, not connected with any other section of the Church. The following statistics were given at the last conference, held at Reading June 1885:—Church members, 192,389; ministers, 1,042; lay preachers, 15,785; class teachers, 10,653; Sunday-school teachers, 60,092; Sunday-school scholars, 405,389; church accommodation for 909,113; value of church property, £2,922,887. They have home, colonial, and foreign missions. They publish seven monthly magazines, and one two-shilling quarterly. They have also three weekly papers. Their doctrinal views are Arminian.

Primogeniture. This term ought to express the fact of a person being the eldest child of

his or her parents, and does express a right which he enjoys in consequence of being an eldest child. As regards primogeniture in England, we must distinguish between the law and the custom of primogeniture. The only law of primogeniture in England is that which ordains that in the event of any person dying intestate as to his real estate, such real estate shall descend to his eldest son. There is no similar rule in the case of an eldest daughter—daughters, where there is no son, inheriting equally. The custom of primogeniture is the custom of settling all one's real property upon one's eldest son.

Primrose League. A Conservative league originated in 1881, in memory of the late Earl of Beaconsfield, and so called because on the anniversary of his death every member is supposed to wear a bunch of primroses. The members, who include both sexes, are styled Knights or Dames, and their lodges are called "**Habitations**." The last report of the Ladies' Executive Committee (for 1885), issued Feb. 1886, states that there are existing 400 "**Habitations**," 57 belonging exclusively to the "**Dames**" of the League. The lady members of the **Primrose League** took an active part in the recent electoral campaign, and exercised considerable influence in London and its neighbourhood in favour of the Conservative candidates. Headquarters, Victoria Street, S.W. Organ of the League, *The Primrose Record* (weekly), 23, Abchurch Lane, E.C.

Prince of Wales's Stakes. See RACING.

Prisage. See REVENUE, THE.

Privileged Communications. A privileged communication may mean either a communication which, although in itself containing all the characteristics of libel or slander, does not subject the person making it to the consequences of uttering a slander or publishing a libel; or a communication which the person to whom it is made cannot be called upon to disclose when giving evidence in a court of justice, although it be relevant to the matter in hand. The former kind of privileged communication can best be discussed under the head of Libel (*q.v.*) or Slander; the latter kind alone will be considered here. Privileged communications of this kind fall under one or other of the following heads: (a) Official communications between public officers on public affairs. But the head of the department concerned may permit such communications to be divulged. (b) Communications made in either house of parliament. But either house can permit them to be divulged. (c) Communications as to the names of persons who have given information concerning offences in whose prosecution the Government is directly interested. (d) Communications made between jurors in the performance of their duty. These are privileged, at all events when a juror is under examination. (e) Communications made to a legal adviser in the course of his employment. But these are not privileged if made in furtherance of crime. The privilege extends to the client as well as to the legal adviser. (f) Communications made during marriage by wife to husband or husband to wife. Communications made to clergymen or medical advisers are not privileged. (See Sir James Stephens' "*Digest of the Law of Evidence*."

Privileges, Committee for. The petition of every claimant to a title of nobility is referred to the Committee for Privileges of the

House of Lords, the president of which is the Chairman of Committees, the Earl of Redesdale (*q.v.*), who has filled the office uninterruptedly since the year 1851, and which hears counsel and takes evidence. Three cases of much interest were adjudicated upon by this body during the year 1885. In one of these Mr. J. Fraser, mining engineer, of Carnarvon, claimed the **Lovat title**, on the ground that he was directly descended from **Alexander Fraser**, who lived about 200 years ago, and was son of Thomas Fraser, younger son of Hugh, ninth Lord Lovat. The present holder of the title maintained that Alexander Fraser died without issue, and the claim was dismissed by the Committee. **Sir John Maitland** and **Major F. H. Maitland** both laid claim to the **Lauderdale Peerage**, on the ground of relationship to a British officer who died in New York about a hundred years ago, and the Committee decided in favour of the latter claimant. After the death of the **Earl of Aylesford**, the claim made for the infant son of the Countess was rejected in favour of the claim of a brother of the deceased.

Privileges of Peers and Members of Parliament. Certain privileges of the peers are defined in standing orders, some of which date from the seventeenth century; while the Commons, through their Speaker, claim their privileges immediately after the first meeting of a new parliament; but the privileges thus defined and claimed have been greatly modified by acts passed by the two houses themselves. At the present time a peer or peeress of Great Britain or of Scotland or Ireland, whether representative or not, and a peeress whether by birth, marriage, or creation—but not a peeress by marriage who has become widowed and has married a commoner—is still free at all times from arrest or imprisonment on civil process; but their servants have long since been deprived of the protection they formerly enjoyed. And by an Act of 1871 bankrupts are disqualified from sitting and voting in the House of Lords until the bankruptcy be determined either by being annulled or by the satisfaction of the creditors; and the seat of a representative peer for Scotland or Ireland is vacated unless his bankruptcy be determined within one year after the date of his becoming a bankrupt. Neither a peer nor a member has, nor did he have formerly, any privilege against being compelled by process of the courts to pay obedience to a writ of *habeas corpus* (*q.v.*) directed to him. When the Speaker's election has been approved and confirmed by Her Majesty, he lays claim by humble petition to the "ancient and undoubted rights and privileges" of the Commons, and especially "to freedom from arrest and molestation for their persons, servants, and estates, to freedom of speech in debate, to free access to Her Majesty whenever occasion may require it, and to the most favourable construction being put on all their proceedings"; and the Queen through the Lord Chancellor confirms all the rights and privileges which have ever been granted to, or conferred upon, the Commons by Her Majesty or any of her royal predecessors. But in regard to the first part of this claim made by and allowed to the Commons, freedom from arrest, and that on strictly civil process only, is now confined to the member alone, and is enjoyed only during a period of forty days before the meeting of parliament, during the

sittings of the House, during a period of forty days before and after any day to which parliament is prorogued, and until an uncertain or "reasonable" period after a dissolution. But members are brought under the bankruptcy laws, for if any one of them be adjudged a bankrupt he is unable to sit and vote for one year, unless the order of adjudication be annulled or his creditors be satisfied; and if at the expiration of one year the bankruptcy be not determined in either of these ways, the seat becomes vacant. Actions at law are maintainable against members of both Houses; they are subject to penalties, and may be arrested for indictable offences; and members of the House of Commons have been committed in certain instances for contempt of court without subsequent interference by the house. Peers and members are not compelled to obey a subpoena, though in practice they do answer a summons of the kind; and they are exempt by statute from serving on juries. Although no member may use unbecoming words in regard to another member without risking suspension if he decline to explain or retract, freedom of speech with reference to those who are not members is enjoyed to the very fullest extent, and statements may be freely made within the walls of parliament which, if uttered elsewhere, would be libellous and actionable. Free access to Her Majesty is the right of peers individually, as well as of the House of Lords as a body; but the other house only possesses the right collectively. By resolutions of the House of Commons no peer, except an Irish peer who has been elected an M.P., can vote or concern himself in a parliamentary election. Members of either house are protected against insult or threatening; and the offer of money to any member for promoting a parliamentary matter is a breach of privilege which may be severely punished.

Privy Council. Judicial Committee of the. In English law the sovereign is the fountain of justice; and in the middle ages a series of courts derived jurisdiction from his inexhaustible prerogative. Thus arose the Superior Courts of Common Law, the Court of Chancery, and the judicial functions of the Privy Council and Star Chamber. The Privy Council dispensed justice in cases for which the constitution of the other courts did not provide. Thus the king is head of the Church as well as of the State; but the Courts of Common Law and Chancery and the House of Lords had defined their provinces before the king had become head of the Church. Accordingly, the final appeal in ecclesiastical causes was formerly to a special Court of Delegates, and is now to the Judicial Committee of the Privy Council. Again, some causes arising in our colonies and dependencies are of such a nature that they cannot be determined by the Courts there. These, and causes removed from such Courts by way of appeal, do not come within the jurisdiction of the ordinary Courts of this realm. Certain causes also relating to patents and copyrights come before the Privy Council. The judicial functions of the Privy Council are now intrusted to a committee consisting of the Lord President, the Lord Chancellor, the Lord Keeper, or first Lord Commissioner of the Great Seal, the Lord Chief Justice, Master of the Rolls, and such Privy Counsellors as shall have held any of the above offices. To these were added by an Act of 1871 four paid judges,

But by the Appellate Jurisdiction Act of 1876 it is provided that as the latter die or retire, they shall be replaced by the Lords of Appeal in Ordinary, who are life members of the House of Lords. Three members, exclusive of the Lord President for the time being, constitute a quorum. Judgment is always given by one of the Committee in the name of all; not, as in the Supreme Court, separately by each member of the Court. These judgments are regarded in every other Court as of great weight, although not exactly binding.

Privy Council Office. See CIVIL SERVICE.

Probate, Legacy, and Succession Duties.

The law relating to these duties is intricate and bulky. Their general nature may be shortly explained. (1) **Probate Duty.**—Every will of personal property must be deposited in the Probate, Divorce, and Admiralty Division of the High Court, a copy thereof being given to the executor. This copy is called the probate, and formerly bore a graduated stamp. Hence the name of probate duty given to the stamp duty upon such personal property as passes by will or by intestacy, the stamp in the latter case having been affixed to the letters of administration. The stamp is now affixed to the affidavit required from the person applying for probate or letters of administration. The duty is levied on the following scale, debts and funeral expenses being deducted in every case:—

Estates not exceeding in value—
£100; no duty.
£100; duty at the rate of £1 for every £50 or fraction of £50.
£1000; duty at the rate of £1 5s. for every £50 or fraction of £50.

Estates exceeding in value
£1000; duty at the rate of £3 for every £100 or fraction of £100.

Where the gross value of the estate does not exceed £300 it is cleared of duty by depositing with the proper officer 15s. for fees of court and 30s. for stamp duty. (2) **Legacy Duty.**—Upon payment or delivery of any legacy, or of the share taken by any person in the event of an intestacy, the legatee or recipient of the share must give a stamped receipt. The stamp duty in these cases is known as legacy duty. It is not levied upon any legacy or share out of a personal estate of less than £100 in all, nor upon any legacy or share taken by the husband or wife of the deceased, or by any child, grandchild, etc., or any parent, grandparent, etc., of the deceased, or by any of the royal family. Where the legacy, etc., is taken by a brother or sister of the deceased or by any of their descendants, the duty is at the rate of £3 per cent. Where the legacy, etc., is taken by an uncle or aunt or by any of their descendants, the duty is at the rate of £5 per cent. Where the legacy, etc., is taken by a grand-uncle or grand-aunt or by any of their descendants, the duty is at the rate of £6 per cent. And in all other cases the duty is at the rate of £10 per cent. (3) **Succession Duty.**—The probate duty can be levied only upon personal estate, because only such estate passes through the hands of executor or administrator. Legacy duty can be levied only upon fragments of the personal estate given by will or taken under intestacy. But there are other modes in which personal property may devolve from the

dead to the living, and real property so devolves as much as personal. By the Succession Duty Act of 1853, a duty graduated like legacy duty is imposed on every succession, whether to real or personal property, not covered by legacy duty. For the purpose of this Act real property upon devolution is taken to be of value equal to the value of an annuity for the life of the successor, and equal in amount to the annual value of the estate. The duty upon a succession to real property is paid in eight equal instalments, the first falling due twelve months after the successor becomes entitled, and the others at successive intervals of half a year.

Procedure, Parliamentary. See PARLIAMENTARY PROCEDURE.

Process Blocks. See ENGRAVING, AUTOMATIC.

Profit à Prendre. See EASEMENT.

Progressist Ministry. See ITALY.

Promenade Concerts (Covent Garden) were established in 1880. The best music is provided, and the concerts are very largely attended. They have been imitated at the Crystal Palace and elsewhere.

Protoplasm (*protos* = first; *plasma* = formative matter). The physical basis of life. A semifluid, granular substance, consisting of carbon, hydrogen, oxygen, nitrogen—probably sulphur and phosphorus in proportions that are at present unknown, and are possibly variable. Protoplasm is stained by solution of magenta, of carmine in ammonia and water, and of iodine in a solution of potassium iodide, and is soluble in a solution of caustic potash. It is formative, and is, under favourable conditions, transformed into formed material such as cellulose (*q.v.*), etc., which neither stain with the re-agents just named, nor dissolve in potash. Rarely protoplasm is found free—i.e. not enclosed by any cell-wall. Instances of free protoplasm are certain zoospores or active asexual bodies of the lower plants, and in the division of fungi known as *myxomycetes*, of which *æthelium* or flowers of tan is the best known (*muxa*, mucus, *mukes*, fungus). Here masses of naked protoplasm called *plasmodia*, of creamy look, creep about over the surfaces of bodies. Generally, however, protoplasm is the main contents of vegetable or animal cells where four regions often present themselves. The layer immediately within the wall, in vegetable cells at least, is non-granular, and is called the primordial.

Protozoa (*protos* = first, *zōon* = animal). The lowest of the sub-kingdoms of the Kingdom Animalia. None of its members has a higher kind of tissue than the cellular; most of them unicellular. Some few are derivatives of a single cell without any continuous segmentation of the primary cell and its successors, as in the case of all other animals, the *Metazoa* (*meta* = after). This sub-kingdom includes three classes. 1. *Rhizopoda* (*rhiza* = root, *pous* = foot). Certain simple and more complex forms that put out from the exterior extensions of the body wall into which the protoplasmic contents flow. These extensions are the pseudopodia or false feet. They serve for movement, and also for the taking-in of food. A simple example of this class is the *amœba*. Of the complex forms the most important are the foraminifera, whose microscopic, but exquisitely formed calcareous shells, form and are forming so much of the

chalk that enters into the shores of certain countries and the beds of certain oceans. 2. *Gregarinida*. A simple cell, never forming an external shell. Certain parasites within cockroaches and earthworms. 3. *Infusoria* (*q.v.*).

Proudhon. See ANARCHISM.

"Prout, Father." See NOMS DE PLUME.

Provincial Colleges (non-Theological). The foundation of Owen's College, Manchester, in 1851, led the way in a movement which, aided by the stimulus of "University Extension," has during the last twelve to fifteen years spread to many of the large non-university towns of Great Britain. The following is a list of such institutions, with date of foundation:—Durham University College of Physical Science, at Newcastle-on-Tyne, 1871; University College of Wales, Aberystwith, 1872; Yorkshire College, Leeds, 1874; University College, Bristol, 1876; Firth College, Sheffield, 1879; Mason College, Birmingham, 1880 (originally a "Science" college, but extended in 1881 so as to include a Faculty of Arts); University College, Nottingham, 1881; University College, Liverpool, 1882; University College, Dundee, 1883; University College of South Wales and Monmouthshire, Cardiff, 1883; University College of North Wales, Bangor, 1884. The scheme of most of these colleges is to provide a higher education after the type of University College, or King's College, London, and they all (except Newcastle) include chairs belonging to "Art" subjects, though several of them began as pure "science" colleges. The government is vested in a council and an academic board or senate, composed of the professors; most of them have a principal, and are open to both sexes without distinction. Thus, the first important experiment in mixed education in this country, has been an indisputable success; no difficulties have arisen, and the presence of lady students in the classes is generally pronounced to have a beneficial effect upon discipline. Many of these institutions show signs of a vigorous college life in Unions and other college clubs. The curriculum may be generally divided under two heads: (1) regular or systematic instruction in the day classes, (2) popular instruction in the evening classes; but some colleges are taking steps to provide systematic evening instruction, especially for teachers in elementary and other schools who desire to widen their culture, and also, in co-operation with school boards, to provide a course of training for the government (teachers) certificate. The regular day students usually aspire to a degree at the University of London (or Oxford, which in 1884 opened most of its honour examinations to women without the condition of residence), or else are engaged in preparation for technical or industrial pursuits. The colleges are also largely attended by non-regular students (mostly ladies), who have no professional object in view, but welcome an opportunity of study under the direction of a professor. The average proportion of male and female students may be roughly stated as two-thirds males and one-third females. The colleges have for the most part secured as their professors men of the highest academical standing. The problem of the future is the development of these colleges into provincial universities—a matter intimately connected with the new movement for the ereation of a teaching university of London. The history of Manchester, which obtained its charter for Victoria Univer-

sity in 1880, points to the establishment in course of time of a University of Wales and a University of the Midlands.

Prudential Assurance Company. See **LADY CLERKS.**

Prussia. See GERMANY.

Prussia, Friedrich Wilhelm, Crown Prince of. See FREDERICK WILLIAM.

Psychical Research, and the Society for. Founded 1882, under the presidency of Professor H. Sidgwick, of Cambridge, "for the purpose of making an organised attempt to investigate that large group of debatable phenomena designated by such terms as mesmeric, psychical, and spiritualistic." Six committees were appointed to examine (1) the nature and extent of any influence which may be exerted by one mind upon another otherwise than through the recognised sensory channels; (2) Hypnotism (*q.v.*) and Mesmerism; (3) obscure relations between living organisms and electric and magnetic forces; (4) haunted houses, and ghosts; (5) spiritualism; and (6) for the collection of existing evidence in connection with these subjects, and especially in connection with apparitions at the moment of death, or otherwise. A special committee was appointed in 1885 to investigate the abnormal occurrences reported by the Theosophical Society. By a recent reconstitution, the committees, with the exception of the literary committee, have been dissolved, and experimental investigations are now left to individual members, whose papers, if accepted, are read at the Society's meetings, and published in the "Proceedings." The main work of the Society has hitherto been the examination of thought transference, or telepathy—viz., the direct communication of thought from one mind to another. Such communication may be established voluntarily for the purposes of experiment, and also appears to take place spontaneously between absent persons on occasions of special excitement, and particularly at the moment of death. Reports of a number of varied and careful experiments in induced telepathic communication are published in the "Proceedings," and a large collection of spontaneous cases has been made, and will shortly be published under the title "Phantasms of the Living." The reality of this telepathic communication is now becoming acknowledged amongst scientists. The Society has recently investigated in India the claims of certain members of the Theosophical Society to the possession of abnormal powers, and has pronounced them to be wholly groundless. The "Proceedings" (Trübner) contain papers on telepathy in its various forms, on mesmerism, with records of valuable experiments, on apparitions of the dead, and haunted houses, on automatic writing, divining-rod, and other subjects. A monthly Journal is also published. The Society has 613 members and associates; it has branches in Cambridge and Oxford, and two allied societies have recently been established in the United States. Hon. Sec.: Mr. E. Gurney; Offices and Library, 14 Dean's Yard, Westminster.

Ptolemy I. See EGYPTOLOGY.

"Puck." See NOMS DE PLUME.

Public Bill. See PARLIAMENTARY PROCEDURE.

Public Libraries Acts, 1875-77. Under these Acts the town council of any borough local board of any local board district, and vestry of any parish, may, and upon the request

in writing of ten ratepayers shall, by means either of a public meeting, or by the issue and collection of voting papers, take the sense of the ratepayers on the establishment of a free library or museum. Should there be a majority of votes in the affirmative the town council or local board may establish and maintain such a library or museum; but a vestry must appoint for that purpose not less than three nor more than nine ratepayers to act as commissioners. The commissioners go out of office one-third at the end of each year, and are to meet once every month. The property of the library, etc., is vested in the commissioners, local board or town council, who may impose any rate not exceeding a penny in the pound, and raise loans where necessary. They cannot do this, however, without the consent of their vestry. No charge is to be made for admission to the library or museum. If the majority of ratepayers voting is adverse to doing anything, the question cannot again be put to the vote until one year has elapsed. A parish wishing to adopt the Acts may for that purpose unite with any other place which has adopted them if the local authority of that place consent.

Public Income and Expenditure for year ending March 31st, 1886. See APPENDIX.

Public Record Office. See RECORD OFFICE, PUBLIC.

Public Worship Regulation Act, 1874. Affords parishioners—on a quorum of three—a ready means of invoking their Bishop's authority, and enables the Bishop to check by his own mandate any practices he may consider improper, or to submit the question to a specially appointed Judge. A new Court has been created, to which is referred the whole authority of the Court of Arches, with Lord Penzance as its first Judge. The Bill was introduced into the House of Lords by the Archbishop of Canterbury (Tait), and into the House of Commons by Mr. Russell Gurney. It was vehemently opposed by Mr. Gladstone, Lord Salisbury, and Mr. Hardy; and championed by Lord Beaconsfield (then Mr. Disraeli) and Sir William Harcourt.

Publishers and Authors. See AUTHORS.

"Publishers' Circular." See BOOK TRADE.

Pugh, Mr. David, M.P., was b. 1806. Educated at Oxford, and called to the bar at the Inner Temple (1837). He is Deputy Lieutenant and J.P. for Cardiganshire, and J.P. for Carmarthenshire. He has also been Chairman of Quarter Sessions and High Sheriff.

Puleston, Mr. John Henry, M.P., of Ffynogion, Ruthin, North Wales, was b. 1830, at Llanfair. Educated at Ruthin grammar school and King's College, London. Resided for a few years in America. Returned in the Conservative interest as member for Devonport (1874-85); re-elected 1885.

Pulley, Mr. Joseph, M.P., of Lower Eaton, Hereford, was b. 1822. Educated at Hackney

grammar school. Member of the London Stock Exchange. Is Deputy-Lieutenant and J.P. for Herefordshire. Returned in the Liberal interest as member for Hereford (1880-85); re-elected 1885.

Pulmogasteropoda. See ZOOLOGY.

"Punch." The well-known illustrated satirical weekly (3d.) was founded July 17th, 1841. Its first editor was Mr. Mark Lemon, to whom succeeded Mr. Shirley Brooks, Mr. Tom Taylor, and Mr. F. C. Burnand (*q.v.*), its present editor. Among its many talented contributors may be noticed the late Mr. Chas. Leach, and Mr. H. W. Lucy, the present editor of the *Daily News*.

Purchase, Abolition of. See ARMY.

Pusey, Rev. Edward Bouverie, D.D., Canon of Christ Church and Regius Professor of Hebrew, Oxford, a distinguished figure in English Church history, b. 1800, d. September 16th, 1882. He was educated at Eton, going from thence to Christ Church. He gained a first-class in classics, and the University prize for a Latin essay. He received an Oriel fellowship, and in 1828 was appointed Regius Professor of Hebrew, with the Canonry of Christ Church. Dr. Pusey's first book was "The State of Religion in Germany." In conjunction with John Henry Newman (*q.v.*), Keble, and Williams, he contributed to the "Tracts for the Times" (see TRACTARIAN MOVEMENT) those "On Holy Baptism" and "On the Benefit of Fasting." He aided in editing "The Library of the Fathers" and "The Library of the Anglo-Catholic Theology." For his sermon on "The Holy Eucharist—a Comfort to the Penitent," he was suspended by the Vice-Chancellor from preaching in the University for three years; and his friend, Dr. Newman, was compelled to resign his vicarage of St. Mary's, in consequence of his having published No. 90 of the "Tracts" before mentioned. Pusey's name was used—as "Puseyism"—to designate the new school of religious thought, and as "Puseyites" to distinguish those whose sympathies were with it. Dr. Pusey maintained that his position was quite consistent with membership in the Church of England, and never entertained the idea of entering the Church of Rome. In addition to the many sermons and pamphlets he wrote, may be mentioned his "Commentary on the Minor Prophets," "Catalogue of Arabic MSS. in the Bodleian Library," "Ancient Doctrine of the Real Presence," and the "Use of Private Confession," with several translations and letters.

Puttkamer, Herr von. See GERMAN POLITICAL PARTIES.

Puy de Dôme. See BEN NEVIS OBSERVATORY.

Pyne, Mr. Jasper Douglas, M.P., was b. 1847. Returned as a Nationalist for West Waterford (1885).

Pythagoras. See EGYPTOLOGY.

Q

"Quarterly Review." Founded Feb. 1809, its first editor being William Giffin, the translator of "Juvenal." The *Quarterly* has long maintained a high reputation as the leading review of the day, its political articles and reviews being contributed by the first authorities, amongst whom have been, and are, the most distinguished names in literature. Editor, Dr. W. Smith (q.v.) (1867).

Quaternary. See GEOLOGY.

Quaternions. A method of applying algebra to geometry invented by Sir William Rowan Hamilton. In mathematics the problems of space and number are reduced to their simplest forms, and the symbols used in general denote the simplest elements. The complexities are treated by complex arrangements. But in certain branches of mathematics symbols are used which represent complicated relations. Thus the trigonometrical functions of an angle are themselves complicated entities. In nearly every case, whether complicated or simple, the symbols represent pure numbers. The numbers may be ordinary numbers or complicated with imaginary expressions, but in the last instance mathematical statements can be brought down to numerical relations. In Hamilton's system of quaternions, however, the symbols do not primarily denote numbers. The basis of this system is to use as the fundamental element symbols denoting lines having both length and direction. These lines are called "vector." Thus ρ means a line of definite length with a definite direction in space. The point at which the vector begins is immaterial, as all vectors parallel and equal are counted as identical. As an illustration of the use of vectors the following may be given. **Addition of vectors.** From any point as origin draw two straight lines making an angle with each other. Call one α , the other β . $\alpha + \beta$ or the sum of them can be thus found. From the extremity of α draw a line equal and parallel to β . This line can be called β , because parallel and equal vectors are considered to be identical. Then join the origin to the extremity of the line thus drawn. The joining line will represent the sum of α and β : it is a vector. Thus we may say that with vectors one side of a triangle is equal to the sum of the other two. Also $\alpha + \beta$ may be looked on as the diagonal of the parallelogram of which the two sides are α and β . Vectors are symbols of transference. The sum of two vectors is that movement of transference which is equivalent to the combined effect of the two separate movements. **Multiplication of vectors.** If we consider a number (e.g., 9) as an operator which applied to a line alters its length and makes it in this case nine times as long as it was before, then the square root of 9, $\sqrt{9}$, or 3, is an operator which repeated twice has the same effect as the original operator 9. Now, if -1 be understood to be an operator which reverses the direction of a line, then the square root of -1 or $\sqrt{-1}$ will be an operator which repeated twice will turn a line from going in one direction to lie in the opposite direction. Now, turning a line at right angles is an operation which repeated twice will make it lie in the

opposite direction. Hence $\sqrt{-1}$, considered as an operation, may be considered to denote a turning at right angles. Hamilton assumes three independent vectors, i, j, k , mutually at right angles, each having the property that the square of it is negative unity, and the product of any one upon another is to turn the latter at right angles. These three vectors are unit lines along three rectangular axes, and any other vector can be expressed in terms of them. Having assumed unit symbols of this kind, the system of quaternions consists of a multitude of rules for the treatment of these new mathematical elements. The advantages are, great elegance and beauty in certain demonstrations. The disadvantages are what might be expected from the use of very complicated elements. Great skill and art is required in bending them to the purposes required. The method has not led to the discovery of new mathematical truths. Even in the hand of its inventor it served only to give a variety of expressions to facts already known. The name "quaternion" is thus derived. Hamilton takes two vectors, α and β , and defines the quotient of β by α , or $\frac{\beta}{\alpha}$ as

that which when multiplied into α will turn it into β , in accordance with the equation derived from ordinary mathematics $\frac{\beta}{\alpha} \times \alpha = \beta$. $\frac{\beta}{\alpha}$ is the "Quaternion." In order to change one vector into another it is evident that two operations are necessary. Firstly, one vector must be altered in length so as to be equal to the other. Secondly, one vector must be turned so as to have the same direction as the other.

Thus $\frac{\beta}{\alpha}$ has two parts—a part which is simply a numerical multiplier called the "tensor," and a part which twists, called the "versor." The tensor can be defined by a single number, but to define the turning and to fix its amount and sense three elements have to be known. Hence to completely define a quaternion there have to be four elements given, and the quaternion derives its name from this number four. Hamilton published his "Elements of Quaternions" in 1858. "Kelland and Tait's Introduction to Quaternions" and "Tait's Quaternions" are the most available sources of information.

"Queen Mary." See IRVING, HENRY.

Queen and Royal Family, The. See APPENDIX.

Queen's Advocate. See ADVOCATE, LORD.

Queen's Counsel are barristers who have been raised to the office of Counsel to Her Majesty. They have no peculiar duties; but take precedence over ordinary barristers, wear silk gowns, and sit within the bar. Their only relation to the Crown is that they may not without special licence appear against it, as in the defence of a prisoner.

Queensland. The most recently organised of the Australian colonies. Comprises the N.E. section of the continent, immediately N. of New South Wales. On the W. it is divided from South Australia by 141st meridian of E.

long. from New South Wales boundary to 26° S. lat., thence by 138th meridian to Gulf of Carpentaria. It is 1,300 miles N. to S., and 800 miles E. to W., including 668,224 sq. miles of area. Population, 309,913. Queensland was originally a part of New South Wales. In 1825 a convict settlement was established on Brisbane River. In 1842, after cessation of transportation, proclaimed as Moreton Bay District of New South Wales. **Explorations** undertaken by Oxley, Leichardt, Mitchell, and many others since, revealed existence of immense tracts inland of rich fertile country, watered by numerous rivers. In 1859 Queensland separated from New South Wales, receiving a constitution of her own. **Executive** vested in Governor and responsible Ministry. Parliament consists of two houses: Legislative Council and Legislative Assembly. The former is composed of 39 members, nominated by Governor for life. Latter elected quinquennially—electors being owners of £100 freehold, or £10 annual value or rent; 55 members, returned by 42 electorates. The capital is **Brisbane** (pop. 36,100), situated on Moreton Bay, 500 miles N. from Sydney; and is a thriving city, rapidly increasing, and provided with various excellent institutions. Other **leading towns** are Bowen, Cooktown, Gympie, Ipswich, Mackay, Maryborough, Rockhampton, Roma, Toowoomba, Townsville, and Warwick, together with a number of rising municipalities and townships. The colony is **divided** into 12 districts; a very small portion being subdivided into 37 counties. The districts are Moreton, coal, gold, sugar, metropolitan; Darling Downs, richest pastoral and agricultural; Burnett, pastoral and tropical agriculture; Port Curtis, gold, copper, marble, agriculture; Leichardt, pastoral and mining; Maranoa, pastoral; Kennedy, richest sugar districts, gold; Warrego, pastoral; Burke, Mitchell, Gregory, Cook, pastoral and mining. The **chief rivers** are the Mitchell, Flinders, Leichardt, and Gregory, flowing into Gulf of Carpentaria; Burdekin, Fitzroy, Burnett, Brisbane, flowing east to the sea; Diamantina, Barcoo, etc., lost inland; and tributaries of Darling flowing south. The Coast Range and the Dividing Range are the **main mountain chains**. The Great Barrier Reef extends all down the eastern coast, at average 300 miles from the shore. The country is generally well-watered and fertile. Many rivers navigable, flowing through valleys clothed in luxuriant vegetation. Forests and jungles abound in exceedingly valuable timber and useful plants. Most productions of tropical and warm temperate zones can be raised. Climate warm, but healthy and favourable to Europeans. Indian and Polynesian labourers are employed, the sugar crop in 1884 reaching 33,361 tons. **Chief exports** are wool, gold, tin, copper, arrowroot, pearl-shell, tortoise-shell, meat, beche-de-mer, rum, sugar, timber, etc. Suitable climate for jute and other fibre-plants, grape, tobacco, etc. Pastoral regions probably the richest in the world. There are 236,154 horses, 4,246,141 cattle, 11,507,475 sheep, 51,000 pigs. About 1,500 miles of railway open up the country, and telegraph wires 11,300 miles. Revenue, £2,720,656, rapidly increasing; and expenditure £2,819,854; debt, £16,419,850. Exports, £5,276,000; imports, £6,233,000. In April 1883 Sir Thos. Mellwarth, the then Premier, took upon himself to annex **New Guinea**, which lies about 90 miles N. of Queensland coast.

Annexation had long been urged on Imperial Government by various Australian governments. The Colonial Minister (Lord Derby) disallowed action of Queensland, but tardily consented to partial ratification, too late to save a large part of New Guinea from Germany. Great agitation in Australia resulted in Inter-colonial Conference at Sydney. Queensland is reported to cordially desire **federation** (*q.v.*) with other colonies, for mutual protection, etc. A movement is on foot for the division of the colony into two, north and south. Very considerable immigration has been taking place for some years, the Government giving free passages to suitable persons. Small homesteads are given free, on occupancy conditions; sugar lands sold at £1 per acre; runs leased on very liberal terms. Education is free and secular, and is well provided for in every branch. It is under control of Minister for Education. There are primary schools and grammar schools. (Consult Bonwick's "Resources of Queensland," Boyd's "Queensland," Pugh's "Queensland Almanac for 1886," Gordon and Gotch's "Australian Handbook for 1886," etc.) There is a **volunteer force** of some 1,200 officers and men, including engineers and four batteries of artillery. There are two or three gunboats and torpedo boats. But these forces are being vigorously augmented and organised. Recent political events have impressed Queensland, as well as the other Australian colonies, with the necessity of providing adequate means for their own defence, in case England were at war with a strong naval power. There are in the colony about 11,000 Chinese, mostly gold-diggers, and some 6,000 to 7,000 Polynesian coolies. The black aborigines, found in unsettled parts, are supposed to number 20,000. They are fiercer than those in other parts of the continent, and have caused some trouble. About 200 are employed as trackers and troopers in the police, which latter numbers about 500, exclusive of black troopers. Besides great capabilities for industrial enterprise, Queensland has immense **natural resources**. Half of its area is stated to be forest, and little has been done to utilise it. Coal, gold, tin, copper, lead, silver, antimony, mercury, are found in quantity. The **progress** of the colony has been astonishing, and its present prosperity is unexampled. It is probably destined to take the lead of the Australian colonies at no very distant date, but the want of both capital and labour is still severely felt.

Queen's Speech, The (*January 21st, 1886*). "MY LORDS AND GENTLEMEN,—My relations with other Powers continue to be of a friendly character. The difference which existed, when I last addressed you, between my Government and that of Russia, on the subject of the boundaries of Afghanistan, has been satisfactorily adjusted. In pursuance of a Convention which will be laid before you, the English and Russian Commissioners, with the full concurrence of my ally, the Amir of Afghanistan, have been engaged in demarcating the frontier of that country. I trust that their work, which is already far advanced, may tend to secure the continuance of peace in Central Asia.—A rising in Eastern Roumelia has given expression to the desire of the inhabitants for a change in the political arrangements under which they were placed by the Treaty of Berlin. My object, in the negotia-

tions which have followed, has been to bring them, according to their wish, under the rule of the Prince of Bulgaria while maintaining unimpaired the essential rights of his Imperial Majesty the Sultan.—Under a Convention which has been concluded with the Ottoman Porte, Commissioners have been appointed on behalf of England and Turkey to confer with his Highness the Khedive, and to report upon the measures required for securing the defence of Egypt and the stability and efficiency of the Government in that country.—Greatly to my regret, I was compelled in the month of November to declare war against Theebaw, the King of Ava. Acts of hostility on his part against my subjects and the interests of my Empire had, since his accession, been deliberate and continuous. These had necessitated the withdrawal of my representative from his Court; and my demands for redress were systematically evaded and disregarded. An attempt to confiscate the property of my subjects trading under agreement in his dominions, and a refusal to settle the dispute by arbitration, convinced me that the protection of British life and property, and the cessation of dangerous anarchy in Upper Burmah, could only be effected by force of arms. The gallantry of my European and Indian forces under Lieutenant-General Sir Harry Prendergast, rapidly brought the country under my power, and I have decided that the most certain method of insuring peace and order in those regions is to be found in the permanent incorporation of the Kingdom of Ava with my Empire. Papers on this subject will be immediately laid before you.—The time which has elapsed since I assumed the direct government of India makes it desirable that the operation of the Statutes by which that change was effected should be carefully investigated. I commend this important matter to your earnest attention.—A protracted negotiation respecting the rights of the Republic of France on the coasts of Newfoundland, under the Treaty of Utrecht, has been brought to a satisfactory conclusion by an agreement, which will be laid before you and before the Legislature of Newfoundland as soon as it assembles. An agreement has also been made with Spain, securing to this country all commercial rights granted to Germany in the Caroline Islands.—Your consent will be asked to legislative measures rendered necessary by a Convention on the subject of International Copyright to which I have agreed. GENTLEMEN OF THE HOUSE OF COMMONS,—The Estimates for the expenditure of the ensuing year, which have been framed with a due regard to efficiency and economy, will be submitted to you. MY LORDS AND GENTLEMEN,—I regret to say that no material improvement can be noted in the condition of trade or agriculture. I feel the deepest sympathy for the great number of persons, in many vocations of life, who are suffering under a pressure which I trust will prove to

be transient.—I have seen with deep sorrow the renewal, since I last addressed you, of the attempt to excite the people of Ireland to hostility against the Legislative Union between that country and Great Britain. I am resolutely opposed to any disturbance of that fundamental law, and in resisting it I am convinced that I shall be heartily supported by my Parliament and my people. The social no less than the material condition of that country engages my anxious attention. Although there has been during the last year no marked increase of serious crime, there is in many places a concerted resistance to the enforcement of legal obligations; and I regret that the practice of organised intimidation continues to exist. I have caused every exertion to be used for the detection and punishment of these crimes; and no effort will be spared on the part of my Government to protect my Irish subjects in the exercise of their legal rights and the enjoyment of individual liberty. If, as my information leads me to apprehend, the existing provisions of the law should prove to be inadequate to cope with these growing evils, I look with confidence to your willingness to invest my Government with all necessary powers.—Bills will be submitted to you for transferring to representative councils in the counties of Great Britain local business which is now transacted by the courts of quarter sessions and other authorities. A measure for the reform of county government in Ireland is also in preparation. These measures will involve the consideration of the present incidence of local burdens.—A Bill for facilitating the sale of glebe lands, in a manner adapted to the wants of the rural population, will also be submitted to you; as also Bills for removing the difficulties which prevent the easy and cheap transfer of land; for mitigating the distressed condition of the poorer classes in the western Highlands and islands of Scotland; for the more effectual prevention of accidents in mines; for extending the powers of the Railway Commission in respect to the regulation of rates; and for the codification of the criminal law.—I trust that results beneficial to the cause of education may issue from a Royal Commission, which I have appointed to inquire into the working of the Education Acts.—The prompt and effective dispatch of the important business which, in an ever-growing proportion, falls to you to transact, will, I doubt not, occupy your attention.—In these, and in all other matters pertaining to your high functions, I earnestly commend you to the keeping and guidance of Almighty God."

"**Querry, Peter.**" See NOMS DE PLUME.

Quilter, Mr. William Cuthbert, M.P., was b. 1841. Member of the Stock Exchange, and chief of the firm of Quilter, Balfour, and Co. He is J.P. for Suffolk. Returned in the Liberal interest as member for South Suffolk (1885).'

"**Quirinus.**" See NOMS DE PLUME.

R

Racing. The racing season proper commences the last week in March at Lincoln, over a course which is called "The Carholme." The two principal stakes are the *Brooklesby*, 5 furlongs, for two-year-olds, won last year by "The Bard," and the *Lincolnshire Handicap*, 1 mile, won last year by "Bendigo." Both races are looked for with much eagerness by turfites, as they often afford valuable clues as to the quality of the various stables. Immediately following Lincoln come the *Liverpool Steeplechases*, raced over the famous Aintree course. The *Grand National*, which is the most important cross-country race of the year, and run over a very difficult course, 4 miles 850 yards long, was last year won by "Roquefort." The *Newmarket 1st Spring*, commonly called "The Craven," comes towards the end of April, and now includes a new handicap, the *Craufurd Plate*, won by "Ordovix" (1885). The principal races are, however, for three-year-olds—the *Column Stakes* and the *Craven Stakes*, won last year by "Red Ruin" and "Easterling" respectively. Following the Craven week comes the *Epsom Spring Meeting*, in which is run one of the principal handicaps of the year, the *City and Suburban*; it ranks next to the "back end" handicaps as a betting race, and was won in 1885 by "Bird of Freedom." The course is the last mile and 2 furlongs of the Derby course. The *Great Metropolitan Stakes* is also run at this meeting; but the length, 2½ miles, has always prevented this race from becoming a popular one. Early in May is run the first three-year-old race of any importance, the *Two Thousand Guineas*, at Newmarket, won last year by "Paradox." On Friday in the same week is also run the first important race for fillies, the *One Thousand Guineas*, won in 1885 by "Farewell." The *Chester Meeting*, which was once the most important of the northern meetings, has now become unfashionable, mainly on account of the circular course, the *Roodee*, having been found dangerous. The *Chester Cup*, which has been won by the best horses England ever produced, is now contested for by third-rate animals, and excites no interest. It was won last year by "Merry Prince." The *Kempton Park Grand Prize* is the next race of importance, and was won in 1885 by "Necromancer." Kempton Park is a gate-money meeting, and managed and owned by a limited company. The course is an excellent one, and the stakes valuable; though comparatively a new meeting it is rapidly becoming fashionable. The *Great Breeders' Produce Stakes* is now one of the best two-year-old races of the year; stakes in 1885, value £1,247, were won by "Saraband." The *Newmarket 2nd Spring* is mainly noteworthy on account of a new race for three-year-olds, the *Payne Stakes*, won 1885 by "Melton." At the *Manchester May Meeting* is run the *Manchester Cup*, a heavy betting race, and of considerable value; won in 1885 by "Borneo." After Manchester comes the *Epsom 1st Summer Meeting*, with the *Woodcote Stakes*, 6 furlongs, for two-year-olds, run on Tuesday, won by "Gay Hermit"; and the *Derby Stakes*, run on Wednesday, value £4,525, for three-year-olds, 1½ mile, and won 1885 by "Melton" (Archer up), after

a tremendous race with *Paradox* (Webb). The course is undulating, with a sharp bend before entering the straight run home, called *Tattenham Corner*. On Thursday, a new race, the *Epsom Grand Prize*, value £3,077, is run, and was won by "Bird of Freedom" in 1885. On Friday the *Oaks*, for fillies only, run over the same course as the Derby, is contested, and won in 1885 by "Lonely." The second week in June brings us to *Ascot*, which, for value of stakes and quality of horses, is the best meeting of the year, as it is the most fashionable. The course over Ascot heath is a severe one, and finishes up hill. The most important races are the *Stakes*, 2 miles, the *Hunt Cup*, 1 mile, and the *Gold Cup*, 2½ miles,—won in 1885 by "Althorp," "Eastern Emperor," and "St. Gatten," respectively. Where every race is contested by the best horses of the year it is difficult to particularise further; but the *St. James's Palace*, the *Prince of Wales's*, and the valuable *Hardwicke Stakes* are the most important. The *New Stakes* is the only two-year-old race of any magnitude, and was won in 1885 by "Saraband." The *Newmarket July*, as its name signifies, comes in July, and is more enjoyable as a picnic than as a race meeting. The *July Stakes*, for two-year-olds, was won in 1885 by "Kendal." The end of July brings us to the *Goodwood meeting*, which is, next to Ascot, the most important of the summer meetings. It is held in the Duke of Richmond's private park; and though the value of the stakes is small, and the racing often third-rate, the fashionable audience has hitherto made the gathering favoured in racing circles. The principal races are the *Stewards' Cup*, 6 furlongs, won in 1885 by "Dalmany"; the *Goodwood Cup*, 2½ miles, won in 1885 by "Althorp." The *Sussex fortnight*, which is begun at Goodwood, is continued at *Brighton*, where on Tuesday is run the *Stakes*, and Wednesday the *Cup*. The meeting, though well attended, produces little good racing; and the same may be said of *Lewes*, at which race-goers finish the summer season. The only meeting of importance held in August is *York*, at which is run the *Ebor Handicap*, 1½ mile, won in 1885 by "Mate." The second week in September brings the famous *Doncaster Meeting*, run on the Town Moor. On Tuesday is run the *Great Yorkshire Handicap*, over the *St. Leger* course, 1 mile 6 furlongs 132 yards, won in 1885 by "King Monmouth"; and on Wednesday the *St. Leger Stakes*, a race in importance second only to the Epsom Derby. It was won in 1885 by "Melton." The course is almost flat, and is one of the finest in England. The *Newmarket Autumn Meetings* now begin: the 1st October only remarkable for the *Great Eastern Handicap* and the *October Handicap*; the 2nd October famous for the *Cesarewitch Stakes*, 2 miles 2 furlongs 28 yards. This is the greatest long-distance handicap in England, and a very heavy betting race; it was won in 1885 by "Plaisanterie." The *Newmarket Houghton* closes the racing season with the *Cambridgeshire*, a short handicap, 1 mile 240 yards, equal in importance to the *Cesarewitch*, and a race upon which are made the heaviest books of the year; it was won in 1885 by "Plaisanterie." There is still

however, the **Manchester November Handicap**, which has of late years been well attended; and various race meetings also take place at **Kempton, Sandown, and Worcester**. The **gate-money meetings** grow more popular year by year; and as very large sums are given away in prizes, their popularity may in time eclipse even such time-honoured meetings as Epsom, Goodwood, or Doncaster. Sandown is the most fashionable of the gate-money meetings near to London; Kempton is also well attended; whilst Leicester, Derby, and Four Oaks are the best of the midland race meetings. In the north, Manchester and Gosforth Park are the most popular. All the flat race meetings are under the control of the **Jockey Club**, which appoints stewards, handicappers, and other officials; whilst steeplechases are looked after by the committee of the Grand National Hunt. The main topic of conversation amongst racing men during the season of 1885 was the so-called **Jockey Ring**, which is supposed to exist for the purpose of arranging the results of races beforehand. No certain evidence has yet been brought forward as to the existence of this ring; but the season of 1886 is expected to prove a sensational one, as many powerful owners have determined to sift the rumours to the bottom. Archer, amongst the jockeys, still remains pre-eminent, but the younger Barrett is looked upon as likely to run him close this season. A powerful racing confederacy was formed in 1885 by Mr. Robert Peck, the well-known trainer, and some of the best horses of the year are now under his care. Lord Falmouth, who had decided to retire from the turf, has now declared his intention of racing this season, and the Prince of Wales will also race in his own name.

Racing Fixtures for 1886.

MARCH.

22. Lincoln.
25. Liverpool Spring.
30. Northampton.

APRIL.

1. Croydon.
1. Croxton Park.
2. Leicester Spring M.
6. Epsom Spring M.
8. Shrewsbury.
8. Sandown Park 2nd Spring Meeting.
8. Thirsk.
13. Newmarket Craven.
15. Pontefract.
17. Alexandra Park.
20. Nottingham Spr. M.
24. Windsor.
26. Kempton Park.
26. Four Oaks Park.
26. Newcastle and Gosforth Park.
27. Newmarket 1st Sp. Meeting.
29. Catterick Bridge.

MAY.

4. Chester.
7. Kempton Park.
11. Newmarket 2nd S. Meeting.
12. Hull.
14. Windsor.
18. York Sp. Meeting.

18. Bath.

20. Salisbury.
20. Doncaster Spr. M.
21. Harpenden.
25. Epsom Summer M.

JUNE.

1. Newton.
1. Lewes.
4. Sandown Park 1st Summer.
8. Ascot.
14. Kempton Park.
14. Four Oaks Park.
14. Redcar.
15. Hampton.
15. Leicester.
16. Manchester.
19. Alexandra Park.
22. Bibury Club.
23. Stockbridge.
23. Beverley.
25. Derby Summer M.
29. Four Oaks Park Summer M.
29. Newcastle and Gosforth Park.

JULY.

1. Windsor.
6. Newmarket July M.
6. Carlisle.
6. Worcester Sum. M.
13. Winchester.
13. Yarmouth.

13. Liverpool July M.
15. Kempton Park.
16. Manchester.
19. Durham.
20. Leicester Sum. M.
22. Pontefract Sum. M.
22. Sandown Park 2nd Summer Meeting.
27. Goodwood.

AUGUST.

2. Croydon Bank Hol.
2. Ripon.
3. Brighton.
6. Lewes.
10. Kempton Park.
10. Redcar 2nd Sum Meeting.
12. Paisley.
12. Windsor.
12. Hull.
17. Egham.
17. Stockton.
20. Alexandra Park.
25. Plymouth.
25. York.
27. Scarborough.
31. Huntingdon.

SEPTEMBER.

1. Cardiff.
2. Derby Septemb. M.
6. Four Oaks Park.
7. Richmond.
8. Warwick.
10. Sandown Park Sep. Meeting.
14. Doncaster Septemb. Meeting.
21. Lichfield.

21. Weymouth.
22. Western (Ayr).
23. Manchester.
28. Newmarket 1st Oct. Meeting.
28. Lanark.
29. Hereford.
30. Perth.

OCTOBER.

2. Windsor.
4. Nottingham Au. M.
5. Kelso.
6. Epsom.
7. Edinburgh.
8. Leicester Autumn.
9. Kempton Park.
11. Newmarket 2nd Oct. Meeting.
14. Hull.
19. Croydon.
19. Newcastle and Gosforth Park.
20. Four Oaks Park.
21. Sandown Park.
21. Thirsk.
25. Newmarket Ho. M.
28. Worcester Au. M.

NOVEMBER.

2. Brighton.
2. Lincoln.
4. Lewes.
4. Shrewsbury.
9. Liverpool.
13. Alexandra Park.
15. Derby Novemb. M.
18. Northampton.
22. Warwick.
25. Manchester.

Rackrent is defined by Blackstone in his "Commentaries" as "a rent of the full value of the tenement, or near it." Practically, a rack-rent means the highest rent which can be obtained for a tenement under free competition, as opposed to a rent fixed by custom, judicial decision, etc.

Radiation. See HEAT.

Radicals. See POLITICAL PARTIES (ENGLISH).

Radnor, Jacob Fleydell-Bouverie, 4th Earl of (creat. 1765); b. 1815; succeeded his father 1869.

Raglan, George Fitz-Roy Henry Somerset, 3rd Baron (creat. 1852); b. 1857; succeeded his father in 1884. The 1st peer was the 9th son of the 5th Duke of Beaufort; he served through the Peninsular war under the Duke of Wellington, and was made a peer at the death of that commander; he attained the rank of field-marshal (1854), and died in command of the forces before Sebastopol. By Act of Parliament (1855) an annuity of £1,000 was settled on his widow, and another of £2,000 on the late peer and his successor (the present lord).

Raikes, Rt. Hon. H. Cecil, M.P., P.C., b. 1838 at Chester, son of Mr. H. Raikes of Flintshire. Entered Trinity College, Cambridge, where he graduated M.A. in 1863. Was called to the bar at the Middle Temple (1863), and returned to parliament for Chester (1868-80), Preston (1882), and resigned his seat in November of that year in order to offer himself for the University of Cambridge (1882-85). He was nominated by Mr. Disraeli as Chairman of Committees of Ways and Means and Deputy

Speaker of the House of Commons in 1874-80. He did not join Lord Salisbury's ministry (1885), but has continued to be a staunch supporter of the Conservative party in the House of Commons. He was for some years chairman of the Council of Conservative and Constitutional Associations. Mr. Raikes was re-elected for Cambridge University at the recent election (1885).

Railway Clearing House, The. The Railway Clearing House is an establishment where the accounts of the various railway companies by which it is maintained are "cleared"; the sums due to one company by reason of the traffic of another over its lines being proportioned and adjusted. The clearing house scheme was originated by Mr. Morrison, a native of Stornoway, in 1842; and was first applied to the settlement of the traffic accounts of the London and North-Western and Lancashire and Yorkshire Railways. Since that date, by reason of the large development of the railway system, most of the railways in England and Scotland are included in the clearing-house sphere of action, and the operations of clearing have necessarily attained a gigantic and complex character. Over 1200 clerks are employed in the offices of the Clearing House in Seymour St., London, N.W., while at the various junctions throughout the kingdom its representatives number 400. The present chairman is Lord Wolverton, and the secretary Mr. P. W. Dawson.

Railway, The Congo. See **ENGINEERING**.
Railway Duty. See **REVENUE, THE**.
Railway Mania, 1846. See **LONDON GAZETTE**.

Railways of Europe. Length of Railways open for traffic in Europe on Dec. 31st, 1884, as compared with the mileage open Dec. 31st, 1883. The measure of length given is the *kilomètre*. (A kilomètre = 39370·79 English inches.)

Countries.	1884.	1883.	Increase per cent.
Germany	36,737	35,908	2·31
France	31,216	29,714	5·05
Great Britain and Ireland	30,514	30,179	1·11
Russia and Finland ...	25,391	24,888	2·02
Austria	22,106	20,857	5·99
Italy	9,925	9,455	4·97
Spain	8,663	8,251	4·99
Sweden and Norway ...	8,162	7,960	2·54
Belgium	4,319	4,273	1·08
Switzerland	2,761	2,750	0·40
Holland and Luxemburg	2,654	2,521	5·28
Denmark	1,944	1,813	7·23
Roumania	1,602	1,520	5·39
Portugal	1,527	1,494	2·21
Turkey, Bulgaria, and Roumelia	1,394	1,394	—
Servia	244	244	—
Greece	175	22	—
Total for Europe	189,334	182,999	3·46

Railways. The stagnation of trade during 1885 made a perceptible difference in the gross receipts of the different railway companies of the United Kingdom. The reduction is estimated at £1,225,000, about one-fourth of which was attributed to a falling off in the passenger traffic. Of course the working expenses fell also, and the shareholding interest suffered proportionately. The ordinary stock of the following companies show a *decline* in value to the amount mentioned on December 26th, 1885, as against the same date in 1884:—**Furness**, 2; **Glasgow and South-Western**, 12; **Great Eastern**, 4½; **Lancashire and Yorkshire**, 11; **Brighton**, 4; **North-Western**, ½; **Sheffield**, 6; **Metropolitan**, 8½; **Metropolitan District**, 20½; **Midland**, 2½; **North British**, 4½; **North-Eastern**, 4; **South-Eastern**, 4; **Taff Vale**, 10. Against this formidable list the ordinary stocks of the following lines were able to exhibit the appended *increases*:—**Caledonian**, 2½; **Great Northern**, 2; **Great Western**, 1½; **Chatham**, 8; **South Western**, ½; **Tilbury**, 5½; **North London**, 6; **North Staffordshire**, 1½; and **Rhymney**, 39½. While the stock and share market is open to diverse influences, these quotations will tell their own tale. It is also interesting to observe that the two greatest fluctuations are to be found in two characteristic lines—the fall of 20½ occurring in the purely passenger interest of the **Metropolitan District**, and the rise of 39½ in the purely goods business of the **Rhymney**. But there are other considerations to be taken into account in these properties. In the former, disappointment apparently prevailed as to the results of the opening of the **Inner Circle** connection with the **Metropolitan**, from which such great things were expected; while as to the latter, the rise is attributed to the proposed fusion with the highly profitable **Taff Vale**, whose £100 of ordinary stock at the end of 1885 (even with a £10 drop) stood on the market at £257 10s. It will be seen that the fluctuation in the great lines was not very much, but the decline was sufficiently unanimous to exhibit the general current of affairs. There is still, however, consolation to be derived from the fact that the longest line in the country, the **Great Western**, showed an advance; as also did the great mineral line, the **Great Northern**. Turning to the railway debenture stocks, which take their dividends as fixed charges, there was a unanimous rise. **Caledonian** Four per cents at the end of 1885 showed an advance of 1½ on the year; **Great Eastern**, 1; **Great Northern**, 2; **Great Western**, 1; **Lancashire and Yorkshire**, 1; **North-Western**, 2; **South-Western**, 3; **Midland**, 2; **North-Eastern**, 5; **South Eastern**, 1. These figures go to prove the continued faith of the public in railway investments as being second only in safety to the government funds. For **Home Railways** £7,000,000 capital was called up during the year, and for **Foreign and Colonial** £15,000,000. The values of **Colonial Railway Stocks**, **Canada**, **Cape**, **New Zealand**, **New South Wales**, **Queensland**, **South Australia**, **Tasmania**, and **Victoria**, showed at the end of 1885 either an increase or the same value as the year before, except a fall of ¼ in one description of Canadian. The largest new line opened in the year 1885 was the **Hull and Barnsley**, between 60 and 70 miles long, with a new dock at the port; and the most interesting was the **Mersey Railway** (see **ENGINEERING**), a tunnel under the river from Birkenhead to Liverpool, which was left to receive its formal inauguration on January 20th,

1886, by the Prince of Wales. The old battle as to the payment of interest out of capital was successfully fought, after renewed attempts, in the Bill of the Regent's Canal and Docks Railway; and earlier in the year the Railway Commissioners decided a vexed question of terminal charges, chiefly as regarded the hop carrying lines in Kent, placing the same on a more distinct basis. Towards the end of 1885 the great lines running through the Black Country made some welcome concessions to the local works proprietors. At the end of 1884 (the latest annual return issued) there were 18,864 miles of railway in the United Kingdom; the capital was £801,464,367; number of passengers, not reckoning season-ticket holders, 694,991,860; total traffic receipts, £67,701,042; or per mile, £3,589; working expenses, £37,217,107; net receipts, £33,305,446. The **Railway Traffic Bill**, introduced by Mr. Mundella, President of the Board of Trade, March 11th, 1886, reconstitutes the Railway Commission, makes its president a Judge of the High Court of Justice, and greatly augments the power of the Board of Trade over the rating and general management of the various companies. **Clause 24** requires every company within twelve months from the commencement of the Act to submit to the Board revised specifications of maximum rates and charges, and gives the Board power to revise them subject to Parliamentary sanction.

Ramaswamy Mudaliyer, Mr. Salem. See INDIAN DELEGATES.

Rain Gauge. See METEOROLOGY.

Ramsay, Baron. See DALHOUSIE.

Ramsay, Mr. John, M.P. Educated at the Univ. of Glasgow. Engaged in mercantile pursuits. Deputy Lieutenant for Argyllshire; J.P. for Lanarkshire and Argyllshire. Returned in the Liberal interest as member for Stirling (1868); Falkirk (1874-85); re-elected 1885.

"Ramsbottom, Mrs." See NOMS DE PLUME.

Ramsden, Sir John William, Bart., M.P., M.A. (Cantab.), was b. 1831. Educated at Eton and Trin. Coll., Cambridge. Under-Secretary of State for War (1857-58); Deputy Lieutenant and J.P. West Riding of York, and Deputy Lieutenant of Inverness-shire. Hon. Col. 1st West Riding Artillery Volunteers. Returned in the Liberal interest as member for Taunton (1853-57); Hythe (1857-50); West Riding of Yorkshire (1859-65); Monmouth (1868-74); Eastern Division, West Riding of Yorkshire (1880-85); Osgoldcross Division (1885).

Ranavalona III. See MADAGASCAR.

Ranke, Leopold von. The great historian; was b. December 21st, 1795, at Wiehe, in the Thuringian forest. His first appointment was that of a teacher at Frankfort (1818). In 1825 he became Professor of History in the University of Berlin. In 1841 he obtained the post of historiographer of Prussia, and in 1859 that of President of an Historical Commission at Munich. In 1865 he received letters of nobility, and on the death of Bök was made Chancellor of the *Ordre du Mérite*. Presented with the freedom of the city of Berlin (Aug. 8th, 1885). His attaining his 90th year (Dec. 21st, 1885) was made the occasion of appropriately recognising his merits by the Court and the universities and the people of Germany. His works as an historian place him far above any of his German contemporaries, and he has become the head of the German historical school, which includes a numerous and influential following. Among his numerous and

very valuable writings, his work on "England in the Seventeenth Century" has obtained wide reputation.

Ranelagh, Thomas Heron Jones, 7th Viscount, d. Nov. 15th, 1885. He was b. 1812, and succeeded his father in 1820. He took a prominent part in originating and forming the Volunteer force in 1850. Lord Ranelagh served for some time in the 1st Life Guards and in the 7th Fusiliers. He was nominated Knight Commander of the Order of the Bath (Civil Division) in 1881. Lord Ranelagh died unmarried, and the title, which was created 1628, has now become extinct.

Rassam, Mr. See ASSYRIOLOGY.

Rathbone, Mr. William, M.P., b. 1810. He is a partner in the firm of Messrs. Rathbone Bros. and Co., and of Messrs. Ross T. Smyth and Co., both of Liverpool. Mr. Rathbone is a Deputy Lieutenant and J.P. for Lancashire and President of Queen's College, Liverpool (1874-85). Has represented the Liberal interest as member for Liverpool (1868-80), Carnarvonshire (1880-85), North Carnarvonshire (1885).

Ravensworth, Henry George Liddell, 2d Earl (creat. 1874); b. 1821; succeeded his father 1878. Was M.P. for South Northumberland (1852-78). The 1st Bart. was an active supporter of Charles I., and was raised to the dignity for his defence of Newcastle (1642).

Rawlinson, Sir Henry. See ASSYRIOLOGY.

Rawul Pindi Conference. Took place between the Ameer Abdurrahman Khan and the Viceroy, Earl Dufferin, in March 1885, on the occasion of Russia's advance on the Afghan frontier. The details of the conference have not transpired, but the meeting itself was a great political fact, the Ameer openly showing himself to his subjects and to India as the ally of England. For the first time the Ameer saw railway, travelling with his escort by train from Peshawur to the Punjab meeting place; and this, with a review held of English troops, is said to have greatly impressed him.

Rayleigh, John Strutt, 2d Baron (creat. 1821); was b. 1842; succeeded his father 1873. The baroness was raised to the peerage in consideration of the military services of her husband, in command of different regiments of Essex militia; he was said to be descended from Sir Godfried Strutz de Hinkelred, Unterwalden, who lived in 1240.

Real Presence, The. In both Eastern and Western Churches from the earliest times the words of Jesus Christ in the institution of the Lord's Supper—"Take, eat, this is My body," and similar words regarding the cup—have been interpreted to mean that the presence and communication of the Body and Blood in that Sacrament are real, though not perceptible by the senses. For many centuries it sufficed to hold the truth, without inquiry as to the mode of the Presence. On this point **Erasmus** says: "Diu satis erat credere, sive sub pane consecrato sive quocunque modo adesse verum corpus Christi" ("It long sufficed to believe that the true body of Christ was present, whether under the consecrated bread or in some other way"). And **Durandus**: "Verbum audimus, motum sentimus, modum nescimus, presentiam credimus" ("We hear the word, we perceive the motion, we know not the manner, we believe the presence"). Gradually in the **Roman Church** and **Western Christendom** generally the doctrine known as **transubstantiation** grew up

and took definite shape. This doctrine is that, upon consecration, the whole substance of the bread and wine become changed into the whole substance of the body and blood of Christ, so that no part of the former remains, except the appearance and attributes perceptible by the senses, and no part of the latter is lacking. But before the **Lateran Council** (1215) the mode of the Presence was not defined. So **Cuthbert Constable**, Bishop of Duresme, writes: "De modo quo id fieret satis erat curiosum quemque relinquere suæ conjecturæ, sicut liberum sit fuit ante concilium Lateranum" ('Concerning the mode in which this is done it were better to leave every inquirer to his own opinion, as it was free to do before the Lateran Council'). **St. Bernard** also advises "indubitatum retinere eodem, et non querere quo pacto" ('to keep the belief without wavering, and not to inquire as to the manner'). By the **Council of Trent** transubstantiation was finally adopted as the Roman doctrine, with the sanction of an anathema affixed. Meanwhile, in the **German Reformation** under **Luther**, a modified form of the doctrine had been adopted, called **consubstantiation**. In this it is held that the substance of the elements remains, as well as their outward attributes, but that with and under these are the true Body and Blood of Christ. Going beyond this, some Protestant bodies, both in England and on the Continent, have denied that there is any real presence in the Sacrament, but assert that the latter is a simple commemorative rite to which a promise of grace is attached. The doctrine of the Reformed Church of England claims to be a reversion to that which we have described above as the ancient belief. It holds the fact of the Presence, but makes no attempt to inquire into the manner, though the Roman dogma is decisively repudiated. Without going too closely into the matter, we may briefly describe the **English Church** doctrine as follows. Just as water in Baptism is sanctified by prayer to the mystical washing away of sins in those faithfully using it, so, in the greater sacrament, the bread and wine are consecrated by prayer to be, to those who use them according to the ordinance, the communication of the Body and Blood of Christ, which are, by such, "verily and indeed taken and received." The doctrine is thus summed up by **Jeremy Taylor**: "The result of which doctrine is this: It is bread, and it is Christ's body. It is bread in substance, Christ in the sacrament; and Christ is as really given to all that are truly disposed as the symbols are; each as they can; Christ as Christ can be given; the bread and wine as they can; and to the same real purposes, to which they are designed; and Christ does as really nourish and sanctify the soul as the elements do the body." The "ritualistic" party in the Church of England (*q.v.*) do apparently, while accepting the Anglican formulas, maintain a Presence in the elements apart from the ordinance, affirming that, after consecration, Christ is present in the elements on the altar "under the veil of bread and wine," and thus rightly to be worshipped and adored in them. This view is hardly distinguishable from consubstantiation.

Real Property. In general it may be said that real property means landed property and all that is affixed thereto—*e.g.*, houses. But this is not an exact definition. For example, (a) leasehold property is not real but personal; (b) land, buildings, etc., owned by a joint-

stock company are the property of its shareholders, and shares in such a company have been expressly declared by Act of Parliament to be personal property; (c) money given by any instrument for the purpose of buying real property is in some respects treated by law as being actually real property. Real property is subject to many special legal rules not applicable to other property. (See "The Land Laws," by Professor Pollock in the "English Citizen" Series.)

Realschulen ("real-schools") originated in a movement belonging to the early and middle part of the present century, and were intended to provide an education of an industrial or technical character. As the **Gymnasium** or classical school stood to the University, so the new modern school or **Realschule** was to stand to the Polytechnic Institute. Greek (and in the original scheme Latin also) was excluded from the **Realschule**; and more time was given to mathematics, physical science, modern languages, and drawing. The German **Realschule** therefore corresponds in large measure to the English "modern side." In the **Realschule of the first Rank** (*erster Ordnung*), established later, the following is the average number of hours per week allotted to the various subjects:—Latin, 5; Mathematics, 15; French, 5; German, 3; English, 3; geography and history, 3; physical science, 3; religion, 3; drawing, 2; writing, 2. The educational world in Germany has for years been agitated by the question whether the education of the **Realschule** of the first rank should qualify for matriculation at the universities. The controversy is similar to that which has recently been decided at Oxford, as to making Greek an obligatory subject on students of physical science. As at Oxford, so in Germany, the scientists appear to be winning in spite of the protests of the large majority of the universities. The Minister of Public Instruction in 1870 (Dr. von Mühler) issued a decree that **Realschüler** should be at liberty to matriculate, and ultimately to obtain a degree in mathematics, physical science, or modern languages. In 1880 the Philosophical Faculty of the University of Berlin formulated a memorial to the Education Office, praying that the decree be rescinded, it being alleged that bad effects have already been observed to spring from it, and that ultimately pupils educated at the **Gymnasium** outstrip **Realschüler**, even in their own branches.

Réaumur (from René Antoine Ferchault de Réaumur, b. at La Rochelle, 1683, d. 1757). The name of one of the three scales used in thermometers (*q.v.*). The level at which the mercury or other fluid stands when the thermometer is completely immersed in melting ice is called the freezing-point of water, and is on the Réaumur scale marked 0°. The level at which the fluid stands when the thermometer is completely immersed in the steam of boiling water is called the boiling-point of water, and is, on the Réaumur scale, marked 80°. The space between the freezing and the boiling point is divided into 80 equal parts, each of which is called a degree. Réaumur's reason for using the number 80 was the ease with which it broke up into aliquot parts. His thermometer is still used in Germany, but not by scientific workers. To turn the Réaumur record into the corresponding Centigrade record, the number on the former scale is multiplied by 5 and divided by 4: *e.g.*, 80° R. are

equivalent to $80 \times 5 \div 4 = 100^\circ$ C. To turn Réaumur to Fahrenheit, multiply by 9, divide by 4, and add 32 : e.g., 80° R. are equivalent to $80 \times 9 \div 4 = 180 + 32 = 212^\circ$ F.

Reay, Donald James Mackay, 11th Baron, (creat. 1628); Baron Reay (1881), by which title he holds his seat in the House of Lords; was b. at the Hague 1839; succeeded his father in the Scottish honours 1876. Is chief of the clan Mackay. Elected Lord Rector of St. Andrews University (1884), and appointed Governor of Bombay (1885). The 1st peer was an active supporter of Charles I. The 10th was successively a member of the second chamber of the States-general of Holland, Vice-President of the Council of State, and Minister of State there.

Recension, Committee of. See REVISÉ BIBLE, THE.

Recidivists. French convicted criminals who have relapsed into crime. During the 1884 session of the French parliament a bill was introduced providing for the transportation of criminals having previous convictions recorded against them. It was proposed to send them to New Caledonia and other suitable islands in the South Pacific Ocean; but on the remonstrance of the British Government, acting in the interests of the Australasian colonies, the bill was allowed to drop.

Record Office, Public. In 1837 appeared the first report of the Record Commission, which was established in 1800, to examine into the state of the public records. In 1838 the Master of the Rolls (*q.v.*) was made also guardian of these records, and the whole were transferred from all their then resting-places to the Record Office in Fetter Lane, Fleet Street. This office is presided over by the Master of the Rolls and a staff of clerks, whose labours in arranging the vast body of materials have been of the greatest importance to historians. See ROLLS SERIES.

Recuperative Gas Lighting. See ILLUMINANTS.

Red Books. See BLUE BOOKS.

Redesdale, John Thomas Freeman Mitford, 1st Earl of (creat. 1876); Baron (1802), was b. in Ireland 1805; succeeded his father 1830. Elected Chairman of Committees in the House of Lords (Feb. 1851). The 1st peer was Lord High Chancellor of Ireland, and was younger brother to William Mitford, the historian of Greece.

Redistribution of Seats Act, 1885. By this Act the total number of members of the House of Commons is raised from 658 to 670. Six additional members are given to England, and twelve to Scotland; Wales and Ireland remaining in this respect unaffected. England therefore has 465 members, Wales 39, Scotland 72 members, Ireland 105 members. Within each of the three kingdoms redistribution of seats is effected on the same principles. All boroughs having a population of less than 15,000 cease to have any member of their own. All boroughs having a population of less than 50,000 have now but one member apiece. All boroughs having from 50,000 to 165,000 inhabitants, and returning two members before the passing of the Act, continue to return two members. The City of London loses two members, and will in future be represented by two. The counties of Hereford and Rutland lose each one member. 162 seats are thus made available for redistribution; and to these must be added six seats which had been suspended

for some time, and the twelve new seats. These seats are redistributed among the counties and largest towns approximately in the ratio of their population. Thus Devonshire is represented by 8 members, Lancashire by 23, Lincolnshire by 7, Yorkshire by 26, Lancashire by 6, Cork county by 7. Liverpool is represented by 9 members, Manchester by 9, Birmingham by 7, Leeds by 5, Glasgow by 7, Edinburgh, Dublin, and Belfast by 4 apiece. All counties and boroughs now return more than one member, with the exception of the City of London, and boroughs of from 50,000 to 165,000 inhabitants, are broken up into districts, each returning a single member. Thus the metropolis outside the City of London now contains fifty-six Parliamentary divisions. In each kingdom these districts are of a pretty uniform population; but the average population is less in a Scotch or Irish division than in an English one. The Act establishes the principle of equality of voting power as between individuals; the medieval distribution of seats having been based on the principle of equality between communities; each county and borough having originally returned two members apiece.

Red-Letter Saints' Days. See DAYS OF DEVOTION.

Redmond, Mr. J. E., M.P. Returned as a Nationalist for North Wexford (1885).

Redmond, Mr. William Hoey Kearney, M.P., was b. 1861. Educated at Clongowes Coll. Returned as a Nationalist for Wexford Borough (1883-85); North Fermanagh (1885).

Red Sea Littoral. Various points in the Red Sea and the Gulf of Aden claim attention as coming within the range of recent European politics. In 1854 the Red Sea was described as a "Turkish lake," but between 1841 and 1873 the Porte placed the west coast, by successive firmans, under the rule of its vassal, Egypt. The Suez Canal (commenced 1858, opened 1869, £4,000,000 worth of shares acquired by British Government in 1875) presents the following details:—

From Port Said on the Mediterranean, by a channel dredged and embanked, through Mensaleh and two smaller lagoons	Miles.
Thence by canal dug through sandhills to Ismailia, on Lake Timsah, the point which was made the basis of British military operations in 1882	30
Through Lake Timsah and a tract of sand; thence by flooding the dried-up Bitter Lakes, and marking out a channel of sufficient depth through them	25
Thence by canal cut through rocky region to Suez, on Red Sea	32

Total length 100
Kosseir, an Egyptian port on the west coast, about 350 miles south of Suez. **Roway**, or **Raweyyah Bay**, on the west coast, N. lat. $21^\circ 05'$, at one time marking the limit of Turkish Nubia. **Jiddah**, nearly opposite, on the east coast, the well-known port for the pilgrims to Mecca. **Suakin**, or **Sawakin**, N. lat. $10^\circ 10'$, next port south of Kosseir, was of considerable importance in Turkish and Egyptian hands, being the termination of caravan routes from Berber and the Nile. Since 1882 it has been occupied by British troops, its harbour improved and fortified, and a railway to connect

t with Berber was commenced, abandoned, and is now again being proceeded with (see *GYPT*). **Massowah**, further south, is an island situated at the entrance of a large bay, which forms between it and the mainland a small but secure harbour. At the head of the bay is the town of **Dohona**, or **Arkiko**, where the Turks possessed a fortress. It is scarcely of less importance than Suakin, being the commercial outlet of Tigré and northern Abyssinia. Till recently in Egyptian hands, it has now (1886) been formally recognised as a possession of Italy, which Power has garrisoned and is proceeding to develop it. Immediately to the south is **Adulis Bay**, better known as **Annesley Bay**, once a notable port, and where a British army landed for the invasion of Abyssinia in 1868. Opposite, on the Arabian coast, is **Kamaman Island**, taken possession of in 1857 by Great Britain, for telegraph purposes. **Dessi Island**, at the mouth of Annesley Bay, was at one time in French hands; but their claim to it was relinquished, in consequence of Turkish objections, previous to 1868. **Eid**, a place of slight importance half way down the coast, between Massowah and Bab-el-Mandeb, was bought from the natives in 1840 by a French firm, and sold to the Egyptian Government in 1867. **Assab Bay**, only forty-five miles above the Straits, was purchased by a Genoese firm in 1866, and was bought and formally annexed by the Italian Government in 1882. The territory includes a belt of some thirty-five miles of coast, with a depth of from two to six miles. It was supposed to be capable of concentrating the trade of Abyssinia and Shoa, and it is but a few hours' steam from the Arabian ports of Mokha and Hodeida, while being on the direct route of steamers to India. But its commercial importance has, so far, proved small, and difficulties have arisen with the native tribes. Now that Italy possesses Massowah, probably Assab will sink into insignificance. **Perim** is an island lying in the mouth of the straits of Bab-el-Mandeb ("the Gate of Weeping"), and entirely commands them. It was taken permanent possession of by England in 1857, and is fortified and garrisoned. **Sheikh Syed** is a small territory with an open roadstead just inside Cape Bab-el-Mandeb. It was purchased in 1868 by a French firm, but has been found useless, though the French Government attempted to constitute it a coaling station. It is at present unoccupied. Its only importance lies in the fact that the heights, if fortified, would command Perim. The owners have been trying to induce their government, or some other not friendly to England, to purchase it. Passing outside the Straits, **Aden** lies on the south coast of Arabia, in the province of Yemen. In early ages it was a place of great importance and large population. Annexed in 1839 by the British, and territories subsequently added by treaty. It now includes some seventy square miles, with population 35,000, having a trade of about £3,700,000 annually. It is strongly fortified and garrisoned, and attached to the Government of India. Considerably to the east are the **Kuria-Muria Islands**, off the coast of Oman, belonging to Great Britain, and used as a station of the Indian telegraph cable. On the African coast of the Gulf of Aden, and below the Straits, is **Tajurah Bay**. Great Britain acquired rights of protection here by treaty in 1840, and in 1858 annexed the islands of **Musha** and **Efat**, at the

entrance of the bay, which remain unoccupied. On the north side of the bay is **Obock**, or **Hobok**, acquired by France in 1862, and since enlarged. This territory now comprises sixty-two miles of coast, with a depth of twenty-four miles. Since 1882 strenuous attempts have been made to develop this place; and, on the retirement of the Egyptian garrisons, the French flag was hoisted at Tajurah, Sagallo, and elsewhere in the bay. Treaties have also been made with the King of Shoa. But, though Obock is the outlet of trade from Shoa, it lies off the direct commercial route, and has other disadvantages. Its harbour needs very expensive improvements, and the place is about on a par with Assab. On the Somali coast are **Berbera** and **Zeila**, and inland of them is **Harar**. These are important towns, and centres of very considerable trade. The first two are now garrisoned by British troops, and in 1885 the whole coast was evacuated by the Egyptians, and placed under British protection. **Socotra**, a large island off Cape Guardafui, is also a British protectorate, though under the rule of the Sultan of Oman. (See "Proceedings of Royal Geographical Society," 1885.)

"Red Spinner." See **NOMS DE PLUME**.

Reduction to Sea Level. See **METEOROLOGY**.

Reed, Sir Edward James, M.P., K.C.B., F.R.S., of Hextable, Swanley, St. Mary Cray, Kent, was b. 1830. Educated at the School of Mathematics and Naval Construction, Portsmouth. Chief Constructor of the Navy (1863-70). Is Vice-President of the Institute of Naval Architects, a member of the Council of the Institution of Civil Engineers, and of the Institute of Mechanical Engineers. He is also a Knight Commander of the Russian Order of St. Stanislaus, of the Austrian Order of Francis Joseph, and of the Turkish Order of the Medjidie. Returned in the Liberal interest as member for Pembroke District (1874-80); Cardiff (1880-85); re-elected (1885), also (1886) on his appointment in the present Gladstone administration as Junior Lord of the Treasury.

Reeves, John Sims, the well-known tenor (who was the son, and is the father, of a musician of considerable powers), was b. near London, 1822. While yet a boy he became organist of a neighbouring church, and as a young man appeared on the opera stage. In 1847, in "The Bride of Lammermoor," at Drury Lane, he first showed his full powers, but, although very successful, he soon left the stage for the concert-room, and in oratorio and ballad-singing has achieved great distinction.

Reformation, German. See **REAL PRESENCE**.

Reformatory Schools. See **APPENDIX**.

Reformed Jews. See **JEWS**.

Regalia. See **CROWN**.

Regatta, Henley. See **HENLEY**.

Regional or Normal Metamorphism. See **METAMORPHISM**.

Registration of Marriages, Jews'. See **JEWS**.

Registration, Parliamentary. The statute law upon this subject is contained in many Acts, the longest and most important being those of 1843, 1865, 1868, 1878, and 1885. These must be referred to for accurate information. Here only an outline of the law can be given. In order to be entitled to vote in the election of a member for parliament, one must be upon the register of the borough or county. In a parliamentary borough, if it is at the same time a municipal borough, the town clerk, and else-

where the clerk of the peace, issues every year his precept to the overseers of the poor in every parish or township, requiring them to make out a list of those who claim to vote. Thereupon the overseers give notice requiring all persons intending to vote to send in their names by a given day. The overseers make out an alphabetical list of all claimants, and have power to object to the names of those whom they believe to be dead or not entitled to vote. Any person on the register may object to any person on the list, but must give notice of his intention so to do. The overseers are to publish a list of claimants and a list of persons objected to, and are to keep copies thereof for themselves, and to deliver copies thereof to the town clerk, or clerk of the peace, as the case may be. The town clerk or clerk of the peace is to transmit abstracts of the above lists to the revising barrister. A sufficient number of revising barristers are to be appointed every year, for London and Middlesex by the Lord Chief Justice, and for other places by the senior judge of assize. The barrister so appointed makes a circuit and holds open court for the revision of the list in each borough and at every polling place in the county. The clerk of the peace, or town clerk, and the overseers must attend. The revising barrister has power to examine witnesses on oath, to hear claims and objections, and to insert or omit names as he finds just. An appeal lies from his decision to the Queen's Bench Division of the High Court, but no further appeal is possible without its express sanction. The list of voters as settled and signed by the revising barrister is sent, in the case of a county to the clerk of the peace, who must have it printed in a book and delivered to the sheriff; in the case of a borough to the town clerk, who must have it printed in a book and delivered to the returning officer. The clerk of the peace or town clerk must keep printed copies of the register for sale at a fixed price. The register is conclusive evidence that the persons therein named have the qualifications annexed to their respective names.

Reichspartei, German. See GERMAN POLITICAL PARTIES.

Reichsrath. See AUSTRIAN POLITICAL PARTIES, and AUSTRO-HUNGARY.

Reichstag. See GERMANY, and GERMAN POLITICAL PARTIES.

Reid, Mr. H. G., M.P., was b. 1837 at Aberdeen. Formerly editor of a newspaper in Edinburgh, and proprietor of newspapers at Middlesbrough-on-Tees. Was President of the Reform Assoc. in the North of England. Returned in the Liberal interest as member for Aston Manor, Warwickshire (1885).

Reinkens, Bishop. See OLD CATHOLICS.

Renan, Ernesto. French orientalist, philosopher and author, b. Feb. 27th, 1823, at Tréguier, Department of the Côtes-du-Nord, in Brittany. He was intended for the Church, and studied in the Seminary of Saint Sulpice, at Paris, which he left to devote himself to the study of oriental languages. He won the Volney prize with his work, "Histoire Générale et Systèmes Comparés des Langues Sémitiques." He was sent (1849) on a scientific mission to Italy, and (1851) was appointed to a post in the Manuscript Department of the Bibliothèque Nationale. He became (1856) a member of the Academy of Inscriptions. In 1860

he was appointed to a mission to Palestine and Syria, which led him to investigations into the origin of Christianity. On his return he was appointed Professor of Oriental Languages in the College of France. He delivered his first lecture in February 1862, and met with stormy manifestations from the Catholic students, which caused him to discontinue his professional work. In 1863 he published his famous work "The Life of Jesus," which roused the active hostility of the clerical party and led to the deprivation of his professorship. The Imperial Government offered him a good appointment in the Imperial Library, which he declined. In 1870 he again became Professor of Oriental Languages in the College of France, and was elected a member of the French Academy (1878). In 1880 he received the Cross of the Legion of Honour. In 1884 M. Renan delivered the Hibbert Lecture. He wrote in 1885 "Le Prêtre du Nemi," and on March 1st, 1886, published the first part of a new work, "The Origin of the Bible."

Renard, M. See BALLOONING.

Rendel, Mr. Stuart, M.P., B.A. Oxon, was b. 1834. Educated at Eton and Oriel Coll., Oxford. Called to the bar at the Inner Temple (1861). Returned in the Liberal interest as member for Montgomeryshire (1880-85); re-elected 1885.

Rennet. See DAIRY FARMING.

Rensch, Prof. See OLD CATHOLICS.

Report on City Companies. See CITY GUILDS.

Representation of the People Act, 1885. The principal provisions of this Act are as follows. (1) It established alike in boroughs and in counties throughout the United Kingdom a uniform household franchise and a uniform lodger franchise as defined by the Representation of the People Act 1867. By that Act any man of full age, and not under a special legal incapacity, who on the 31st of July in any year, and during the preceding twelve months, has been an inhabitant-occupier of any dwelling-house, and has in respect thereof been rated to the relief of the poor, has a household franchise; and any man of full age, and not under a special legal incapacity, who during a like period has resided in the same lodgings of the annual value, unfurnished, of £10, has a lodger franchise. (2) It establishes alike in boroughs and in counties throughout the United Kingdom an occupation franchise wherever the land or tenement occupied is of £10 clear yearly value. (3) It provides that where a man inhabits any dwelling house by virtue of any office or service, and the dwelling-house is not inhabited by his employer, he shall be deemed an inhabitant-occupier for the purposes of the Act. This provision creates the service franchise. (4) It provides against the multiplication of votes by creating rent-charges, joint tenancies or tenancies in common. The Act does not abolish the 40s. freehold franchise, or the ancient franchises of the boroughs. It is supposed to have enlarged the constituencies by nearly 2,000,000 electors, 1,300,000 in England, 200,000 in Scotland, and 400,000 in Ireland. The greatest proportional increase in the number of electors is in Ireland. The present total number of electors exceeds 5,000,000, nearly one-third of the male inhabitants of the United Kingdom.

Residual Products. See WASTE MATERIALS, UTILISATION OF.

Return Trade Winds. See METEOROLOGY.
Reuter's Telegram Company. See NEWS AGENCIES.

Revelstoke, Edward Charles Baring, 1st Baron (creat. 1885), son of the late Henry Baring, Esq., M.P.; was b. 1828. A merchant and banker in London.

Revenue, British. The revenue receipts of the United Kingdom for the financial year ended March 31st, 1885, amounted in round numbers to £88,000,000. Of this sum the bulk came from **Customs and Excise Duties**, and from **Stamps and Taxes**. There are three large and independent Government organisations at work upon the collection of revenue. The **Customs** are administered by a Board of Commissioners with a **Central Department** at Thames Street, E.C., and with ramifications at every port and almost every creek in the United Kingdom. The **Excise** and the collection of general **Stamp Duty, Property and Income Taxes, Land Tax and House Duty**, are administered by the **Commissioners of Inland Revenue**, whose headquarters are at Somerset House. The revenue from the **Post Office (g.v.)** and **Postal Telegraph Office (g.v.)** is, as is well known, derived mainly from the sale of **stamps**. The work of administering the Post Office is vested in a Postmaster-General, with a central department at St. Martin's-le-Grand. This department is one which conducts one huge, or rather several huge government businesses, which have turned out to be profitable concerns, adding considerably to the total of the revenue returns. Although the Post Office is classified in the estimates as a Revenue Department, the two Revenue Departments proper are the Customs and Inland Revenue. The **Customs** are the duties levied on certain goods or merchandise upon importation. Formerly almost every article imported, whether manufactured or raw material, was in the Tariff, as the list of dutiable goods is called. In 1842 the **Customs Tariff** numbered no fewer than 1,200 articles. Now it contains less than a score, which are as follows:—Cocoa, coffee, chicory, dried-fruits, tea, tobacco, spirits, wine, goods containing spirit, beer, playing cards, and gold and silver plate. "**Prisage**," or the right exercised by the early Plantagenet kings to take a cask, or two casks according to size, from the wine-shops on their arrival at a port, formed the basis of Customs Duties. In 1302 the king commuted his prisage on wine for a fixed charge of two shillings for every ton, called "**butlerage**." This received statute sanction in 1353, and must be regarded as the foundation of the tariff. In mediæval times the Customs furnished the principal share of the king's revenue. At the Restoration it produced about £1,000,000 out of a total revenue from all sources of about £1,800,000. In recent years there has been a strong tendency to reduce the Customs Duties, and to eliminate all articles of prime necessity from the Tariff. This was originated by Sir Robert Peel, and developed by Mr. Gladstone, until the tariff has been reduced to the dimensions indicated above. Notwithstanding this reduction, however, the **gross revenue** from Customs Duties, in the year ended March 31st, 1885, was £20,668,666. Of this sum, £344,249 was for coffee, cocoa, and chicory; £546,966 for dried fruits; £4,313,837 for spirits; £4,795,843 for tea; £9,376,093 for tobacco; £1,235,200 for wine; and about £50,000 for other goods and for charges on delivery from the bonded warehouses. Dissecting the Customs

gross revenue in another way, we find that £16,902,396 has been received from **England** (including the Isle of Man), £1,782,619 from **Scotland**, and £2,038,302 from **Ireland**. Almost two-thirds of the amount received at the English ports comes from the **Port of London**, the total receipts of which were £10,459,088, or rather more than one-half of the total amount received from England, Scotland and Ireland. **Liverpool** comes next, with a total annual receipt of Customs revenue to the extent of £2,770,196, some £500,000 in excess of the total receipts from all the other English out-ports. The total amount refunded to merchants as "**drawback**" upon goods exported, and upon which duty had been previously paid, amounted in the year to £103,788, and of repayments consequent upon over-entries to the amount of £6,200. **Customs drawback**, or allowances upon exportation, may be paid upon the following goods: beer (foreign), coffee (for ships' stores), manufactured tobacco (including cigars and snuff); and **Excise drawback** upon beer and British spirits. A comparatively small portion of the Customs duties is levied immediately on importation, or, as it is technically termed "**ex-ship**," the bulk being derived from goods taken from the bonded warehouses, which have been established for the convenience of the merchants. The business of seeing that the goods which enter the bonded warehouses be not released without the payment of duty is intrusted to a large staff of officials in what is known as the **warehousing branch of the Out-door Department of the Customs**. The officials who test and assess the wet-goods, and conduct operations with reference to the goods in bond, are the **gaugers**. The Customs operations in the **Bonded Warehouses** allowed for the facility and convenience of trade numbered 80,655 in 1885. Formerly the Customs and the Excise had two different warehousing systems, but these have been assimilated quite recently. The **water-guard branch of the Out-door Department** is intrusted with the many and important duties in connection with importation and exportation. The "**duty**" is paid by the merchants into the "long room" of the various Custom Houses. At least once a day the cash is deposited in the local bank, and at stated intervals remittances are sent to the Bank of England. At all the ports there is a second officer, who is responsible with the collector for the cash; and besides a good local system of accounts, there is a vigorous and effective system of check and control exercised by the Central Office of Accounts at Thames Street. There are four **Commissioners of Customs**, each of whom receives a salary of £1,200 per annum, whilst two receive an additional £800 and £300 respectively, for acting as chairman and deputy-chairman. Besides these there are six officials in London who receive salaries amounting to £1,000 a year and upwards. The salary of the collector at Liverpool was, until recent years, £1,800 a year. This amount has been reduced to £1,400. The collectorship next in value is that of Dublin. The Customs revenue collected at Belfast, Bristol, Glasgow, Hull and other ports is severally considerably in excess of that received at Dublin. In 1884-5 there were 4,596 established officers, 233 copyists, and 1,380 temporary glutmen, or a total of 6,209 men employed, the mean charge per man being £120 per annum. Of late years there appears to have been a considerable in-

crease in the number of detected cases of **smuggling**. Last year (1885) there were no less than 2,698 seizures, the great bulk of which arose from the smuggling of tobacco and spirits. The quantities seized in these instances amounted to 17,485 lb. of tobacco and cigars, and 141 gallons of spirits. There are now less than seventy collections of Customs in the United Kingdom, the number having been much reduced through the system introduced recently of appointing **district collectors** in lieu of having an independent collector at each port. The **Inland Revenue** service comprises three distinct departments—**Excise, Stamps, and Taxes**. The total amount collected by the entire Service during the year ended March 31st, 1885, was £54,437,945; against which however there is a sum of £1,227,229 for allowances on drawback and repayments of duty. There are eighty-nine collections in the United Kingdom, six of which are in London—viz. London East, West, Central, North and South, and Hammersmith. The six London collections yield an aggregate revenue of £10,730,779, an amount which just exceeds the sum collected by the Customs in the port of London. London East, West and Central, and Dublin, severally collect upward of £2,000,000. There are eight collections, whose receipts are between £1,000,000 and £2,000,000. The receipts of the other collections range from those of Belfast, £715,820, down to those of the lowest, Welshpool, £62,043. The **Excise returns** show a total of £27,305,776. **Spirit Duty** yielded £14,612,000; **Beer Duty** £8,746,000; **Railway Duty** 3,580,000 and **Excise Licences** £3,728,349. Of the **Beer Duty** it may be remarked that the last return shows the highest amount of duty since it was first imposed, five years ago, in lieu of the **Malt Tax**. The number of **Licences** taken out by brewers have decreased from 21,000 in 1880, when the Malt Tax was repealed, to 13,799 in 1885. The number of **Licences** taken out by private brewers in the same period advanced from 69,709 in 1871 to 86,303 in 1885; the revenue from this source yielded £27,412 at the latter date. The revenue from **Stamps** in the year ended March 31st, 1885, yielded £12,019,840; and from **Taxes** under such heads **Land Tax** and **House Duty** £2,919,865; and **Property and Income Tax** £12,192,465. The **Excise Duties** are collected by Inland Revenue officials; the **Stamp Dues** by the Inland Revenue and Post Office officials, aided by authorised persons holding licences to deal in stamps. The collection of the **Land and House Duty** and **Income Tax** is undertaken by local officials; but three attempts have been made by as many **Chancellors of the Exchequer** to hand over the collection of these duties to government officials. The **Excise** was first imposed in the time of the **Commonwealth**. It was at first a most unpopular form of taxation, and had to be forced on the people at the point of the sword. At the **Restoration**, when it yielded about £600,000 per annum to the Revenue, the Excise was continued by an Act of Parliament, which remains outstanding on the Statute Book at the present day. The **Stamp Duties** are governed by the **Stamp Acts, 1870** (33 and 34 Vict., c. 97, 98), which came into operation on January 1st, 1871. The **Table of Duties** is a most elaborate one, the items being too many to enumerate in our limits. The yield from stamps exceeds £12,000,000 annually. It is interesting to note that the stamp duty oh

receipts for amounts of £2 and upwards dates from the war with our American Colonies which resulted in American Independence. **Stamp Duties** on legal documents are of old date, and can be clearly traced to 1694. In 1881 **Mr. Gladstone** enacted that **penny adhesive stamps** might be used for postal and inland revenue purposes indiscriminately. The **Probate, Legacy and Succession Duties** yielded the largest revenue in stamps—viz., £7,819,464. The next largest item, stamps on deeds and legal instruments, yielded £1,811,945. **Receipt, draft and other Stamps**, produced £934,381. It should be noted that the large amount collected from **Legacy and Succession Duty** was abnormally swollen by some £500,000 through the special exertions which were successfully made to clear off old arrears and reversions. The **Land Tax** and **House Duty** (the latter of which does not operate in Ireland) are, in some form or other, of very ancient origin, and are the developments of the very oldest modes of taxation in the country. About a century ago (1798) **Pitt** imposed an **Income Tax**, at times as high as 10 per cent., as a war tax. This was repealed in better times. **Sir Robert Peel** reimposed the **Income Tax** in 1842 "for three years," as a temporary measure. The tax, however, has never been repealed. (A table showing the rate of **Income Tax** charged in each year from 1842 to 1885, and the Acts by which imposed, will be found in the Appendix.) The yield per penny amounts in round numbers to £1,990,000. The number of officials of all grades employed in the **Inland Revenue** service is 6,302, their salaries and allowances amounting to £1,131,798, an average of less than £200 per annum per man. Upwards of £250,000 is paid for assessment and poundage on the collection of **Income and Property Tax**. The total cost of the **Department** in 1885 was £1,883,004. (See APPENDIX for returns to March 31st, 1886.)

Reversion. When a person who has an interest in lands or houses grants to another person a lesser interest in the same, he creates for himself what is called a reversion. Thus when the tenant in fee or tenant in tail of property grants to another person a life estate in the same property, he creates for himself a reversionary estate in fee or in tail respectively. So likewise a reversion is created when the owner of a house or farm lets it on lease, or when the holder of a lease for a longer term, say ninety-nine years, sublets the leasehold for a shorter term, say seven or twenty-one years. Thus the landlord is the reversioner of the tenant, and the reversion is generally accompanied by a right to receive rent.

Revised Bible, The. The year 1885 will be memorable for the publication of the Revised edition of the Authorised Version of the Old Testament. The **Authorised Version** was published in 1611, and had thus been in universal acceptance for two-and-a-half centuries, when a new revision, which had been from time to time strongly urged by scholars, was at length seriously taken in hand. The first definite action was taken by the Convocation of the Province of Canterbury, in February 1870, and on May 6th a **Committee of Revision** was appointed. The committee at first consisted of sixteen members, but after a time was enlarged by the addition of several Oriental scholars of recognised distinction, laymen as well as divines, belonging to other ecclesiastical bodies. It commenced operations on June 30th, 1870,

and held its final sitting on June 20th, 1884, the revision thus covering a period of fourteen years. There were 85 sessions, occupying 792 days of six hours each. The greater part of the sessions were for ten days each, generally opening on Tuesday in each alternate month and continuing till the Friday of the week following. The revision of 1611 was carried through in 1607-10.—Among the rules laid down for the guidance of the Revision Company were the following general principles:—(1) "To introduce as few alterations as possible into the text of the Authorised Version, consistently with faithfulness; (2) To limit, as far as possible, the expression of such alterations to the language of the Authorised and earlier English versions; (3) That the text to be adopted be that for which the evidence is decidedly preponderating; (4) And that when the text so adopted differs from that from which the Authorised Version was made, the alteration be indicated in the margin; (5) To revise the headings of chapters, and pages, paragraphs, italics, and punctuation." There is no room to question that the Revisers clearly apprehended, and honestly and anxiously carried out the true principles of revision. With the utmost care to furnish an exact representation of the sacred books as they actually are, they are acknowledged to have manifested due reverence for the unique literary position of the Authorised Version.—The labour of the undertaking, apart from home preparation, may be judged from the fact that every sentence had to pass three readings. On the first reading alterations were carried by a bare majority. Such alterations were then printed and circulated among the members, and also submitted to the *American Old Testament Revision Company*, which had been appointed on the invitation of Convocation to co-operate in the important work. Before the organisation of the American committee, however, the English Revisers had completed the second revision of the Pentateuch; but the American criticisms were before them on proceeding to the final revision, and, for the rest of the work, before proceeding to the second revision. On the second revision the invariable rule was applied that no change should be finally made in the text of the Authorised Version except by the vote of two-thirds of the company present and voting; and on the third revision, which was devoted to objections and points reserved, the same rule was of course rigidly observed. In many cases, where the majority, though falling short of two-thirds, was yet weighty, the rendering so preferred has been placed in the margin. Besides the marginal readings, all questions of punctuation and division into paragraphs (except where these affected the sense) were decided by a simple majority. The two-thirds rule no doubt strongly tended to a conservative result. The *Bishop of Durham*, writing about the time when the Revisers commenced their labours, said, "If there be any reasonable grounds for apprehension, the danger is that the changes introduced will be too slight to satisfy the legitimate demands of theology and scholarship." The Bishop's forecast, it is generally admitted, has been largely verified.—The Revisers had no alternative but to adhere to the Received, or, as it is commonly called, the *Massoretic Text*. This has come down to us in MSS. of no very great antiquity, and belonging to the same family or recension.

The earliest of which the age is known for certain bears date A.D. 916, and others range from the twelfth to the fifteenth century. That other recensions were at one time in existence is a very probable inference from the variations in the ancient versions, which were made (speaking roughly) from the third century B.C. to the fourth century A.D., the oldest being the *Greek* or the *Septuagint*. These versions, accordingly, represent MSS. much older than any we possess, and, though of unequal value, they occasionally show superior readings. The state of our knowledge, however, would not have justified any attempt at an entire reconstruction of the text on the authority of the versions; and the Revisers, making a virtue of a practical necessity, prudently contented themselves with the *Massoretic Text* as a basis, departing from it, as the Authorised translators had done, only in exceptional cases. Where the *Massoretic Text* itself presented variations, the Revisers selected one reading as the best for translation, placing alternative readings of sufficient probability or importance in the margin. In some few cases of extreme difficulty, where they were driven to adopt a reading on the authority of the ancient versions, they notified in the margin the departure from the received text. Even this limited recognition of the readings of the ancient versions is regarded by many scholars as one of the more important features of the Revised Version. They are most frequent in the books of Samuel (where the Hebrew text is rather corrupt), and in parts of the prophets; and occasionally (*e.g.*, Psalm xxiv. 6, lix. 9, 1 Samuel vi. 18) they have actually been admitted into the text. Such variations as were very probable though not necessary corrections of the text were simply indicated in the margin.—The *historical books* naturally presented the least difficulty, while the *poetical and prophetical books*, with their condensed and elliptical style, were extremely troublesome to cope with, the translation always tending to assume the form of a commentary. A powerful advantage was derived from the immense advances that have been made in the scientific knowledge of Hebrew itself and of cognate languages; the Authorised translators having been dependent for their knowledge of Hebrew on the Jewish grammarians and lexicographers. Perhaps in no portion of the undertaking did this improved linguistic study prove more effective than in the *Book of Job*, parts of which are hopelessly unintelligible or grievously misrepresented in the Authorised Version. The characteristic *parallelism of Hebrew poetry* has been carefully exhibited by an arrangement in lines. The *Book of Job* is treated as one long poem, the opening and the close standing in prose form. The *Psalms*, the *Proverbs*, the "*Song of Songs*," which is Solomon's, the *Lamentations of Jeremiah*, are also set forth in lines; as well as the *song of Miriam*, *Balaam's blessing* of the Israelites, *Joshua's adjuration of the Sun and Moon* to stand still, and similar passages. The prophetical books, though containing frequent parallelism, are, except in purely lyrical passages, regarded as impassioned prose.—The venerable structure of the Authorised Version has been retouched with reverential self-restraint. The Revisers state that they "have borne in mind that it was their duty not to make a new translation, but to revise one already existing, which for more than two centuries and a half had held the

position of an English classic. They have therefore departed from it only in cases where they disagreed with the translators of 1611 as to the meaning or construction of a word or sentence; or where it was necessary for the sake of uniformity to render such parallel passages as were identical in Hebrew by the same English words, so that an English reader might know at once by comparison that a difference in the translation corresponds to a difference in the original; or where the language of the Authorised Version was liable to be misunderstood by reason of its being archaic or obscure; or finally, where the reading of an earlier English version seemed preferable, or where by an apparently slight change it was possible to bring out more fully the meaning of a passage of which the translation was already substantially accurate." It is only by detailed study, and by considering the effect on considerable passages, that one can arrive at a just view of the alteration that has been effected. Frequently two or three small changes redeem a whole passage, if not from unintelligibility, from ambiguity or obscurity. **Important elucidations** may be seen in 1 Kings vi. 1 foll., 2 Kings xvii. Job xxvi., 5 foll., xxviii., 1 foll., Isaiah xvii. 9-11, xxi. 7, 8, xxvii. 2-5, Jeremiah xx. 8-10, Ezekiel xl.-xlii. The apparent Hibernianism in the account of the destruction of Sennacherib's army, "When they arose early in the morning they were all dead corpses," is easily rectified by avoidance of the pronominal confusion: "When men arose early." "Who maketh his angels spirits" is turned into sense: "Who maketh winds his messengers." "The king's daughter is all glorious within," an amazing statement, is corrected into "Within the palace all is glorious." "Her clothing is of wrought gold" appears in the more comfortable form "Her clothing is inwrought with gold." The spiteful reviewer will no longer have authority to repeat "Oh that mine adversary had written a book!"—the true reading is, "Oh that I had the indictment which my adversary had written!" The useful text about the deceased wife's sister is slightly changed in expression: "And thou shalt not take a woman [the American revisers urge the retention of 'wife'] to her sister, to be a rival to her, etc. [instead of 'to vex her']." "The table of the congregation" has been everywhere changed to "the tent of meeting," on account of Exodus xxv. 22, xxix. 42, 43, and also because it conveys an entirely wrong sense. The change, says a critic, is an improvement, "both because it preserves the distinction of the original between the tent which covered the inner structure and the structure itself, and because the word 'meeting,' though it does not exclude the sense of congregation, if the text anywhere requires it, properly represents the other meaning, that in this sanctuary was the meeting-place of Jehovah with his people." Obscurity has been dispelled, or misleading obviated, in the distinctive employment of "people" and "peoples." In Psalm lxvii., "Let all the people praise thee, O God; let all the people praise thee," it is at least doubtful whether the "nations" of verse 4, or God's people, Israel, be referred to; while the Septuagint gives λαοί, and the Vulgate populi, rightly and clearly. In Isaiah lv. 4, "Behold, I have given him for a witness to the people, a leader and commander to the people," we naturally understand Israel to be meant; whereas we

ought to read "peoples." Dissent has been strongly expressed in some cases where untelligible proper names replace common names. "There were giants in the earth in the days" reads "There were Nephilim"; "Nephilim" means "giants." Instead of "groves" of the idolaters we now have "Asherim," with marginal explanation "probably the wooden symbols of a god, Asherah." "Hell and destruction are not full" becomes "Sheol and Abaddon are not satisfied." Why not say "the under-world or some equivalent, for Sheol? The Revisers ought to be allowed to make their own explanation as regards this very important alteration. "The Hebrew Sheol, which signifies the abode of departed spirits, and corresponds to Greek Hades, or the under-world, is variously rendered in the Authorised Version by 'grave,' 'pit,' and 'hell.' Of these readings 'grave' if it could be taken in its original sense as used in the Creeds, would be a fairly adequate equivalent for the Hebrew word; but it is so commonly understood of the place of burial that to employ it frequently would lead to inevitable misunderstanding. The Revisers therefore, in the historical narratives have left the rendering 'the grave' or 'the tomb' in the text, with a marginal note, 'Sheol,' to indicate that it does not signify 'place of burial'; while in the poetical writings they have put most commonly 'Sheol' in the text and 'the grave' in the margin. Isaiah xiv., however, where 'hell' is used more of its original sense, and is less likely to be misunderstood, and where any change in so familiar a passage which was not distinctly an improvement would be a needless loss, the Revisers have contented themselves with leaving 'hell' in the text, and connected it with other passages by putting 'Sheol' in the margin." Among the words that are gone may be mentioned "artifice," "leasing" (falsehood), "nephew" (grandson), "peep" (chirp). To "ear" and "earring" (ploughing) are much regretted by philologists. "Eliezer of Damascus" is transmogrified into the vague "Demmesek Eliezer." The "catatrice" is now a basilisk, and the "unicorn" has become a wild ox. But "dragon," "satyr" are retained; and so are "amice," "fats," "inward" (intimate), "occurrence," "shroud," "sith," "tired." The following new, and it does seem strange that they should not have been used before: "askance, aslant, baggage, basilisk, castanets, chirp, clasp, confines, consternation, crawling, cresset, foray, gaunt, godless, harass, indictment, memorable, muscles, pinions, porcupine, reservoir, rival, signature, soar, startle, tumult."—Of grammatical points the most noteworthy is the substitution of "its" for "his," as possessive of the neuter pronoun. "Its" does not occur at all in the Authorised Version of the Bible in Leviticus xxv. 5 the true reading is "which growth of its own accord." "Its" occurs ten times in Shakespeare, and there is evidence that it was coming into use about the time of the Authorised Version. It first occurs in a Bible in the spurious edition of 1526, supposed to have been printed at Amsterdam. It does not appear in the genuine edition of 1744. A more important, if less interesting matter is the successful treatment of Hebrew tenses, which are very difficult to represent in English. "In the old ver-

of the book of Joel," says the *Spectator*, "the whole is run together as one discourse, in which exhortations, threatenings, promises, and narrative, are confused together by the skilful reading of the tenses of the verbs. But the Revisers have reduced the whole to order by a few changes of futures to presents, and past tenses." Yet there is an occasional allusion. "And one cried unto another and said, Holy, Holy, Holy is the Lord of Hosts"—"cried" is inadequate to express continued repetition. But this is a weakness in the revisers' grasp of modern English.—The old division into verses has been abolished, paragraphs being substituted; but the numbering of the chapters and verses has been retained for convenience. One consequence of the rearrangement in paragraphs has been the mission of the headings of chapters, "which" or other and more important reasons it was thought advisable to abandon, as involving questions that belong rather to the province of the commentator than to that of the translator." For the same reason the page headlines have also been swept away.—The co-operation of the American revisers, which we have already referred to, is a very pleasing feature of the great work. The views of the American scholars were accepted or rejected on their merits, precisely in the same way as the views of English revisers. By a well-judged rearrangement, however, all the points of ultimate difference were placed on record. "Many of them," say the English Revisers, "will be found to be changes of the language which are involved in the essentially different circumstances of American and English readers; others express a preference for the marginal reading over that given in the text; others again involve a real difference of opinion; but all show that they have been dictated by the same leading principle, the sincere desire to give to modern readers a faithful representation of the meaning of the original documents."

Revision Companies of the Bible, Names of Living Members of. See APPENDIX.

Reynolds, Mr. W. J., M.P. He became a solicitor (1879). Returned as a Nationalist for East Tyrone (1885).

Rhætic. See GEOLOGY.

Rhizopoda. See ZOOLOGY.

Ribble Navigation. See ENGINEERING.

Ribblesdale, Thomas Lister, 4th Baron (creat. 1797); was b. 1854; succeeded his father in 1876. Was Lord-in-waiting to the Queen (May 1880 to June 1885); was re-appointed Feb. 1886, but resigned on account of Mr. Gladstone's unpopularity in Irish policy.

Richard, Mr. Henry, M.P., was b. 1812. Educated at Highbury Congregational College. Resigning his position as an Independent minister at Southwark, he (1848) became secretary of the London Peace Society, which office he still holds. Entered parliament in the Liberal interest as member for Merthyr Tydvil (1868-85); returned unopposed 1885. Mr. Richard moved the recent resolution (On March 19th, 1886) to transfer the power of making war and of forming alliances from the Cabinet to Parliament.

Richards, Brinley, the musician, d. May 3rd, 185. He was b. 1819, at Carmarthen, where his father was an organist. He studied at the Royal Academy, and obtained the King's scholarship. A successful song-writer, many of whose songs became very popular, and among them "God bless the Prince of Wales." Mr.

Richards was also successful as a lecturer on musical subjects.

Richardson-Gardner, Colonel Robert, M.P., was b. 1827, and was called to the bar at the Middle Temple (1853). He is a Deputy Lieutenant of the Tower Hamlets, and Hon. Colonel of the North-East London Rifles. Colonel Richardson-Gardner sat as Conservative member for Windsor (1874-80). Re-elected 1885.

Richardson, Mr. Thomas, M.P., was b. 1821. He is connected with the marine-engine-building firm of T. Richardson and Sons, Hartlepool. Is Deputy Lieutenant and J.P. for Durham. Returned in the Liberal interest as member for Hartlepool (1874-5, 1880-5); re-elected 1885.

Richmond and Gordon, Charles Henry Gordon-Lennox, K.G., P.C., 6th Duke of (creat. 1675); was b. 1818; succeeded his father in 1860. Appointed President of the Poor Law Board (March 1859); was President of the Board of Trade (March 1867 to Dec. 1868); and Lord President of the council (Feb. 1874 to May 1880); reappointed President of the Board of Trade (June to Aug. 1885), when he was appointed Secretary for Scotland. Was M.P. for West Sussex (July 1841 to Oct. 1860); was aide-de-camp to the Duke of Wellington (1842-52); and to Visct. Hardinge (1852-54). The 1st peer was son of Charles II. by the Duchess of Portsmouth; that sovereign having been heir of Charles Stuart, 4th Earl of March, 3rd Duke of Richmond and 6th Duke of Lennox, conferred those honours on his illegitimate son.

Richter, Hans, by birth a Hungarian, b. at Raab, 1843. After receiving a musical education, he became conductor at the National Theatre, Munich (1868), at the Pesth Theatre (1871), and at the Court Opera Theatre in Vienna (1875). He conducted the famous Wagner Festival at Bayreuth in 1876, when a shower of orders descended on him from the gratified German princes. In 1880 he conducted his first concerts in London, and created much astonishment by leading the greatest works entirely *memoriter*. His control over an orchestra is phenomenal. His concerts have been annually continued, and he at present directs the Philharmonic Society. He has also conducted fine performances of German operas in London. In 1885 he was chosen director of the Birmingham Festival.

Richter, Herr Eugen. See GERMAN POLITICAL PARTIES.

Riel. See GREAT BRITAIN.

Rigby, Mr. John, Q.C., M.P., was b. 1834. Educated at the Liverpool College and at Trinity College, Cambridge, he was second wrangler and second Smith's prizeman, and was elected a Fellow of Trinity. He was called to the bar at Lincoln's Inn (1860), of which Society he is now a Benchet, and (1875-81) was junior equity counsel to the Treasury. Created Q.C. 1881. Returned for North Cambridgeshire in the Liberal interest (1885).

Right, The. See FRENCH POLITICAL PARTIES.

Ripon, Bishop of. See CARPENTER, DR. W. B.

Ripon, George Frederick Samuel Robinson, P.C., 1st Marquis of (creat. 1871), Earl de Grey (1876); b. 1827; succeeded his father (Prime Minister as Visct. Goderick 1827) in 1859. Was created a marquis in recognition of his services as chairman of the High Joint Commission which arranged the Treaty of Washington in 1871; appointed Under-Secretary of

State for War (June 1859); removed to the India Board (Feb. 1861); returned to the War Office (July 1861), and was Secretary of State for War (April 1863 to Feb. 1866), when he resumed his position at the India Board; finally resigned (June 1866); appointed Lord President of the Council (Dec. 1868), resigned Aug. 1873; Governor-General of India (1880-4), where his administration was associated with the much debated "Ilbert" Bill (*q.v.*); D.C.L. of Oxford (1870), and in the same year was installed Most Worshipful Grand Master of Freemasons. Having joined the Church of Rome, he resigned this post in 1874. Was M.P. for Hull (July 1852 to March 1853, when he was unseated on petition); sat for Huddersfield (April 1853 to April 1857); and for the West Riding of York (April 1857 to Jan. 1859); First Lord of the Admiralty (Feb. 1886). The 1st Earl of Ripon was a well-known minister, and held many high state offices between 1810 and 1846, having been Prime Minister for a short time in 1827.

Ristich, John, Servian statesman, was b. in 1831 in Servia. He was educated in Germany, and afterwards in France. He began his official career in the Ministry of the Interior, under Prince Karageorgevitch (*q.v.*), and soon rose to a leading position in that department. In 1858 he was made secretary to the embassy sent to Constantinople by Obrenovitch III, and became afterwards Servian Envoy at the Porte. In 1867 he was appointed Servian Minister of Foreign Affairs, and when Obrenovitch was assassinated he was the Envoy sent from the Provisional Government at Belgrade to bring home Prince Milan from Paris. From 1868 to 1872, during the minority of Prince Milan, M. Ristich was member of the Council of Regency. When Prince Milan became King M. Ristich became his Minister for Foreign affairs, and subsequently President of the Servian Council of State. He played a very prominent part in the events that led to the Russo-Turkish war of 1877-78, and has exerted considerable influence in connection with recent (1885-86) events which have transpired between Servia, Bulgaria, and the Powers.

Ritchie, Mr. Charles Thomson, M.P., was b. 1838. He is a merchant and manufacturer in the East of London. J.P. for Middlesex, and Major 3rd Battn. Royal East Surrey Regt. Appointed Secretary to the Admiralty (1885). Returned in the Conservative interest as member for Tower Hamlets (1874-85); re-elected 1885.

Ritualism. The Ritualists in the Church of England may be best defined as those who advocate and adopt an abundant symbolism in public worship, in opposition to the Puritan idea which dispenses as far as possible with all outward signs or ceremonies. The Ritualist maintains that these things assist the worshipper, and render public worship more orderly and reverential. The Puritans hold that they tend to degrade the worship and distract the worshipper; substituting the form for the spirit. Strictly speaking, therefore, Ritualism is compatible with all forms of doctrine, and independent of all. But, as a matter of fact, in the Church of England an extreme Ritual is almost exclusively associated with extreme views on the Real Presence (*q.v.*); and the points of Ritual about which there has been the most violent contention are those which involve the adoration of Christ as present on the Altar under the forms of bread and wine. Since the trial of

the Rev. W. J. E. Bennett, of Frome, for heresy in enunciating a Sacramental Doctrine of the Real Presence very closely resembling Transubstantiation (the judgment condemned the doctrine, but gave Mr. Bennett the benefit of some doubt as to the exact meaning of his language concerning it), a precise definition of Ritualistic doctrine has had to be sought for from irresponsible laymen rather than from the clergy; but the view which we have indicated is that to which all Ritualistic symbolism points. With regard to their conduct of public worship the Ritualists rest their case upon the famous Ornaments Rubric (before Morning Prayer in the Prayer-Book), which enjoins such "ornaments of the Church and of the ministers thereof" as "were in this Church of England," by the authority of Parliament, in the second year of the reign of King Edward VI." This reference seems not only to legalise the "ornaments" recognised by and used with the first Prayer-Book of Edward VI., but also to give a general approval to that book. Certainly, though this first Prayer-Book was afterwards amended, it was never disavowed; and if it contain, as is admitted in the Preface to our Prayer-Book, nothing contrary to sound doctrine and wholesome practice, the contention of the Ritualistic party for toleration is materially strengthened. Having said enough to make the general position intelligible, we will briefly notice the points of ritual which have been in dispute, and other things more or less common among Ritualists, distinguishing them from other members of the Church of England. 1. The Eastward Position (*q.v.*) of the priest at Consecration (condemned in the Purchas case). 2. Lights on the Holy Table, except when needed for giving light (condemned in Westerton v. Liddell, and subsequently). Two candles on the altar, symbolising Christ as the Light of the World, are probably permissible. Any greater number are generally on a shelf behind the table. 3. The Vestments. Convocation, following the judgment in Liddell v. Westerton, held that the vestments prescribed in the first Prayer-Book are lawful. These are "a white albe plain, with a vestment (chasuble) or cope." (N.B. *White* vestments, seldom seen, are more in accordance with ancient English use than the coloured ones, which are originally Roman.) 4. The use of Incense for the censuring of persons and things. This is pronounced unlawful, alike by judgments, Convocation, and opinion of counsel. 5. Mixing Water with Wine for the Communion. Condemned; but a very ancient and general custom, and probably not unlawful. 6. The use of Wafer Bread. A very disputed point; condemned by modern judges, and probably not contemplated by Reformers, but not an unmistakable terms excluded. 7. The introduction of the Hymn, "O Lamb of God, that takest," etc. (the *Agnus Dei*), immediately after the Consecration of the Elements. Unauthorised, and probably illegal. Besides these disputed points are many others, which are more or less revivals of ancient and almost obsolete custom. Among these we may mention Fasting before Communion from the previous midnight—a custom very widely spread. Regular Confession to a priest, with Absolution and Penance. Prayer for the dead—a subject on which the English Church of to-day is silent, though condemning

the Romish Doctrine of Purgatory. Bowing at the Holy Name. Making the sign of the Cross frequently. Kneeling during the Incarnation Sentences of the Nicene Creed. Some also practise the Invocation of Saints. In a few Ritualistic churches seven "sanctuary lamps" are hung in front of the Altar, symbolising the seven spirits of God. The Ritualist movement in the Church of England arose out of the great High Church movement inaugurated by Dr. Pusey, A. J. Newman, and the Tractarians. The name was first used in 1866. The vestments were first worn about ten years earlier. The American Church defined its position by a stringent canon on ceremonies in 1874. In the same year the Public Worship Regulation Act (*q.v.*) was passed in England to make the process of law against Ritualists simpler. But public opinion has very largely doubted the policy of that Act, and it has not been much used.

Ritual Murder. See **Jews**.

River Plate Meat Supply. See **MEAT SUPPLY**.

Robartes, Thomas Charles Agar-Robartes, 2nd Baron (creat. 1869); was b. 1844; succeeded his father 1882. Was M.P. for East Cornwall (1880-2).

Robert and Charles, MM. See **BALLOONING**.

Roberts, Mr. John, M.P., a solicitor, of Bryn Adda, Bangor, was b. 1843. He was returned as Liberal member for Carmarthen-shire at the recent election by a large majority.

Roberts, Mr. John, M.P., was b. 1835. Is J.P. for Denbighshire and Liverpool. Returned in the Liberal interest as member for Flint Boroughs (1878-85); re-elected 1885.

Roberts, Rev. Richard, a distinguished Wesleyan Methodist divine, elected President of the Conference July 1885. Entered the ministry (1845); appointed to Brecon (1846), since which time he has occupied important circuits, both in the provinces and London, always staying at each place the full term of three years, and was appointed to the Superintendency of the Lambeth Circuit (1885). Was appointed a member of the Legal Hundred (1874), an honour much appreciated in the ministry, as no one outside that circle is eligible for the Presidency. In March 1886 Mr. Roberts was presented at Court, the only President of the Wesleyan Conference who has been so distinguished.

Roberts, Sir Frederick, G.C.B., V.C., son of Sir Abraham Roberts, G.C.B., was b. 1832. Entered the army, and became (1851) second lieutenant in the Bengal Artillery; captain (1860); served with distinction in the Indian mutiny, and received the thanks of the Governor-General, the Victoria Cross, the Mutiny Medal, and was made Brevet-Major. Took part in the Abyssinian war (1865), where he served as Assistant Quartermaster-General, and obtained a medal and the brevet rank of Lieut.-Colonel. In 1872 he was made C.B. for his services in the Looshai Expeditionary Force. In the Afghan war of 1878 Major-General Roberts commanded the column sent to operate through the Koorum Valley, and surmounting the difficulties of the Peiwar Pass, gained a brilliant victory at Charasiab and entered Cabul. On the investiture of Candahar by Ayub Khan he rapidly performed the march from Cabul to Candahar (one of the most brilliant military feats of modern times)

and utterly defeated the Pretender. For these services he was created (1881) a baronet, G.C.B., C.I.E., and received various honours. General Roberts was sent (1881) to take command of the forces against the Boers in South Africa, but was recalled on his arrival at Cape Town in consequence of peace being made. General Roberts has recently succeeded Sir Donald Stewart in the command of the Indian army.

Robertson, Mr. Edmund, M.P. Educated at Oxford Univ., where he graduated in Classical Honours, 1st Class. Called to the bar at Lincoln's Inn (1872). Fellow of Corpus Christi Coll., and Public Examiner. Returned in the Liberal interest as member for East Dundee (1885).

Robertson, Mr. Henry, M.P., M.A., C.E., was b. 1816. He is engaged in the coal and iron business, and is a Director of several railways. Deputy Lieutenant and J.P. for the counties of Denbigh and Merioneth; High Sheriff of Merioneth (1870). Returned in the Liberal interest as member for Shrewsbury (1862-68); re-elected (1874-85); Merionethshire (1885).

Robertson, Mr. James Patrick, Q.C., M.P., was b. 1845. Educated at the University of Edinburgh. Called to the Scottish bar (1867). He was subsequently appointed Q.C. under Lord Salisbury's Government, and was made Solicitor-General for Scotland. Returned in the Conservative interest as member for Bute-shire (1885).

Robinson, Mr. Thomas, M.P., of Longford, Gloucester, was b. 1827. J.P. and alderman of Gloucester; four times Mayor. Returned in the Liberal interest as member for Gloucester. (1885).

"**Rob Roy.**" See **NOMS DE PLUME**.

Robson, Mr. William Snowden, M.P., was b. 1852. Educated at Caius Coll., Cambridge. Called to the bar at the Inner Temple (1880). Returned in the Liberal interest as member for Bow and Bromley Division, Tower Hamlets (1885).

Rocheffort, Henri (properly Victor Henri, Marquis de Rocheffort-Luçay), French journalist, novelist and politician, b. Jan. 30th, 1883. He began life as a private tutor and writer, afterwards obtaining a post in the office of Prefect Haussman, and finally devoting himself exclusively to authorship. He wrote novels in an elegant and attractive style. He was a political writer in *Charivari*, the *Nain Jaune*, the *Soleil*, and the *Figaro*. He was obliged (1868) to give up the editorship of the *Figaro* on account of his attacks on the government of Napoleon III., when he founded the *Lanterne*, a paper which continued the war against Caesarism. Compelled to leave Paris, he took refuge in Belgium. In Sept. 1869 he was returned to the Legislative Assembly for the first arrondissement of Paris. On his return he founded the *Marseillaise*. He was a member of the National Defence after the Revolution of 1870. In March 1871 he laid down his mandate for the National Assembly, regarding the cession of Alsace-Lorraine as illegal. From this time he instigated the Commune. In the beginning of May, after the suppression of his paper, he took to flight, but was arrested at Neaux. Tried by court-martial at Versailles, he was condemned to transportation to New Caledonia. He escaped in March 1874, came back to Europe, and settled in Switzerland, where he again published the *Lanterne*.

He returned to Paris after the general amnesty of July 11th, 1880, and conducted a new Radical opposition paper, the *Intransigent*; and as member for Belleville represented the "Reds," resigning his seat (Dec. 1885), in consequence of a divergence of opinion in respect of the proceedings of the Government.

Rochester, Right Rev. Anthony Wilson Thorold, D.D., 98th Bishop of (founded 604), younger son of the late Rev. Edward Thorold, rector of Hougham-cum-Marston, Lincolnshire; b. 1825; educated at Queen's Coll., Oxford; ordained deacon (1848), priest (1849); appointed minister of Curzon Chapel, May Fair (1868); Canon Residentiary of York (1874); Examining Chaplain to the Archbishop of York the same year, also Provincial Chaplain to the Archbishop of Canterbury, which appointments he held until his consecration as Bishop of Rochester (July 1877). The diocese includes the boroughs of Southwark and Lambeth, also the divisions of East Surrey and Mid-Surrey.

Rocks. See GEOLOGY.

Roden, John Strange Jocelyn, 5th Earl of (creat. 1771); Baron Clanbrassil (1821), by which title he holds his seat in the House of Lords; was b. 1823; succeeded his nephew 1880; served in the Crimea, and was present at the battles of the Alma, Balaclava, Sebastopol, and Inkerman; was for some years Vice-Chamberlain of the Queen's Household.

Rodney, George Bridges Bennett Rodney, 7th Baron (creat. 1782); b. 1857; succeeded his father 1864. The 1st peer was the celebrated Admiral, who received the title for the victory over the French fleet under the Comte de Grasse, and a grant of £1,000 per annum to every holder of the title.

Rodrigues, M. J. C. See PANAMA CANAL.

Roe, Mr. Thomas, M.P.; was b. 1832. Elected Mayor of Derby (1867), and for many years has taken a prominent part in municipal matters. Mr. Roe entered parliament as Liberal member for Derby (1883-85); re-elected 1885.

Rogers, Mr. James Edwin Thorold, M.P., was b. 1823. Educated at Southampton, at King's Coll., London, and at Magdalen Hall, Oxford (1843), where he graduated, proceeding to Holy Orders, from which he subsequently withdrew. Professor of Political Economy at that University (1862-68). He has also been Professor of Economic Science and Statistics at King's Coll. since 1859. Author of "Six Centuries of Work and Wages," and other important works on Political Economy. Returned in the Liberal interest as member for Southwark (1880-85); Bermondsey Div. (1885).

Rohlfis, Herr. See SOUDAN.

Rollo, John Roggesson, 10th Baron (creat. 1651); Baron Dunning (1869), by which title he sits in the House of Lords; b. 1835; succeeded his father 1852. Elected a representative peer for Scotland in 1860, and in 1868 polled an equal number of votes with the Earl of Kellie. The 5th peer was a distinguished officer in the army during the Crimean war.

Roll of Solicitors. Every solicitor of the Supreme Court is entered on the roll of solicitors (now a book), kept by the clerk of the petty bag (see ROLLS, MASTER OF). He is "struck off the rolls" either at his own request, e.g., on retirement from practice, or for misconduct. Several solicitors have of late years been struck

off the rolls for the misuse of clients' moneys, and the decisions in this respect are very stringent.

Rolls, Master of the, is the chief keeper of the records preserved at the Public Record Office (*q.v.*). It is an office of great antiquity (first mention A.D. 1256), and position. Originally he was merely the custodian of chancery rolls; later he acquired judicial authority in the Court of Chancery; and in recent times he shares with the vice-chancellors the hearing in the first instance of any suit; and by the Judicature Act, 1873, he was made a member of the High Court of Justice and of the Court of Appeal. He is likewise head of the petty bag office (formerly the common law side of the Court of Chancery, now an office in the High Court of Justice), and admits solicitors of the Supreme Court.

Rolls Series. The abbreviated title of the important series of publications issuing from the Record Office (*q.v.*). Lord Romilly, the Master of the Rolls (*q.v.*), in 1857 proposed to the Government that the vast body of important historical material lying in the form of MSS. at the Record Office should be edited by competent writers; and the suggestion (first made in 1822 by the House of Commons to George IV.) was adopted. The series now comprises most of the principal English chronicles, and many other documents of the highest subsidiary importance to the historian, since they throw contemporary and often unbiassed light upon early events that it has hitherto been impossible to fully interpret.

Roman Catholic Church. The name of that community of Christians who profess the same faith, partake of the same sacraments and sacrifice, and are united under one head, the Pope or Bishop of Rome and successor of St. Peter, and under the bishops subject to him. Its essential parts are the Pope, bishops, pastors—so far as they are priests—and laity. The Catholic's rule of faith is the whole word of God, written and unwritten, and this as taught and explained by the Church, or, since the Vatican Council in 1870, by the infallible utterances of the Roman Pontiff speaking *ex cathedra*—viz., when, as pastor-teacher of all Christians, he defines a doctrine regarding faith or morals. One great and central object of faith and worship is the Mass, which is the mystical sacrifice of the body and blood of Christ, instituted by Himself at the Last Supper, and is one and the same with the Sacrifice of the Cross. Scripture and tradition are appealed to in support of this and other doctrines—as the Seven Sacraments, the honour due to the Blessed Virgin, Purgatory, Invocation of Angels and Saints, etc. There is quite a distinction between what is of doctrine and what of discipline; the former belonging to the deposit of faith taught by Christ and the Apostles, which is invariable, whilst the latter, founded on the decisions and canons of councils and the decrees of popes, is the Church's external policy as to government, and may vary according to times and circumstances. The Roman Catholic Church abounds in a variety of religious orders, for men and women, with constitutions suited to all tastes, times, and countries, yet practising in common, poverty, chastity, and obedience, called the "evangelical counsels"; in charitable and educational institutions, as asylums, hospitals, orphanages, schools, colleges, universities; nor does she

forget the divine commission to teach all nations, for her missionaries penetrate to every corner of the world. The Sacred College of Cardinals—72 in number, after the 72 disciples—are the supreme council or senate of the Church and the advisers of the sovereign pontiff, and at the death of a pope they elect his successor. They preside over the 15 Roman congregations or departments for ecclesiastical affairs, and thus represent the Pope in the regular exercise of his pontifical authority. The total number of Catholics over the world, ruled by about 1,200 archbishops and bishops, is estimated at 220,000,000, of which there are in Great Britain and Ireland 6,000,000 (i.e. 4,000,000 in Ireland and 2,000,000 in England and Scotland), and in the rest of Europe more than 100,000,000. Ireland is divided into four metropolitan provinces, subdivided into dioceses, each ruled by a bishop, of whom there are 27, including the four archbishops. The number of priests amounts to 3,450, who serve 2,380 churches and chapels, situated in 1000 parishes. The 22 archbishops and bishops of Great Britain consist of: 1st, for England and Wales, 1 archbishop (of Westminster), with 14 suffragans and 2 auxiliaries; 2ndly, for Scotland, 2 archbishops (1 of Glasgow without suffragans, the other of St. Andrews and Edinburgh, with 4 suffragans). The total number of priests in England and Wales is 2,256, serving 1,260 churches and chapels; in Scotland 320, serving 306 churches and chapels. The United States has about 7,000,000 Catholics, 74 archbishops and bishops, 7,296 priests, 8,000 churches and chapels, and 500,000 pupils in parish schools. In the British possessions of North America there are about 2,500,000 Catholics, 35 archbishops and bishops, 2,200 priests, over 2,000 churches and chapels and stations, 200 academies, and 3,600 parish schools. From statistics like these, which can be approximated to in all the other parts of the world by the bishops presiding over the different dioceses or vicariates, and are published occasionally, may be inferred how complete is the organisation of the Church, and how vigorously she exercises the forces at her command for the extension of the Catholic faith.

Roman Law. See CIVIL LAW.

Rome. See ITALY.

Romilly, William Romilly, and Baron (creat. 1865); b. 1835; succeeded his father 1874. The 1st Baron (the 2nd son of Sir Samuel Romilly) was, as Sir John Romilly, Solicitor-General, Attorney-General, and Master of the Rolls.

Romney. See CINQUE PORTS.

Romney, Charles Marsham, 4th Earl of (creat. 1801); was b. 1841; succeeded his father in 1874. The 1st Bart. was one of the six clerks in the Court of Chancery temp. Charles I.; he was knighted and subsequently created a baronet at the Restoration. The 1st peer represented Maidstone in several parliaments; and the 3rd Earl sat for West Kent.

Roscoe Sir Henry Enfield, M.P., F.R.S. LL.D., was b. in London, 1833. Educated at Univ. Coll., London, and Heidelberg. Appointed (1857) Prof. of Chemistry at Owens Coll., Manchester. Elected president of the Chemical Society of London (1880). Returned in the Liberal interest as member for South Manchester (1885).

Rosebery, Archibald Philip Primrose, P.C., 5th Earl of (creat. 1703); Baron Rosebery (1828), by which title he holds his seat in the House of Lords; b. 1847; m. (1878), Hannah, dau. of the late Baron Mayer de Rothschild, M.P. for Hythe; succeeded his grandfather the 4th Earl in 1868. Appointed a commissioner to inquire into endowments in Scotland (1872); Under-Secretary of State, Home Office (1881-83); elected Rector of the University of Edinburgh (1880); was Lord Privy Seal, and First Commissioner of Works (1885). Holds the office in the present Gladstone cabinet of Secretary of State for Foreign Affairs (1886). Lord Rosebery moved the appointment for a select committee upon "the best means to improve the efficiency of the House" of Lords (June 19th, 1884).

Rose, Sir William, Clerk of Parliaments, d. Nov. 20th, 1885. The deceased, a brother of the late Lord Strathnairn, whom he survived only about a month, was the second son of Sir G. H. Rose, Clerk of Parliaments. He was b. 1808; educated at St. John's Coll., Cambridge, and was Deputy-Clerk of Parliaments (1848-75), when he was promoted to the post of Clerk of Parliaments.

Rosetta. See EGYPTOLOGY.

Ross, Baron. See GLASGOW, EARL OF.

Ross, Major Alexander Henry, M.P., a son of the late Mr. Charles Ross, M.P., and a Lord of the Admiralty, was b. 1829. Educated at Eton and at Christ Church, Oxford. Called to the bar at the Inner Temple (1853). Served in the West Kent Militia, retiring with the rank of major. J.P. for Middlesex, and formerly a member of the Metropolitan Asylums Board. Returned in the Conservative interest as member for Maidstone (1880-85); re-elected 1885.

Ross and Cromarty. See CROFTERS.

Rosse, Lawrence Parsons, 4th Earl of (creat. 1806); b. 1840; succeeded his father in 1867; elected a representative peer for Ireland (1868). The 3rd Earl, who was for many years President of the Royal Society, was well known for the improvements he effected in the construction of the telescope.

Rossetti, Dante Gabriel, son of Gabriel Rossetti, celebrated as a commentator on Dante, was b. in London 1828; received the name of Dante in memory of his father's literary works, as mentioned above. He began his career as an artist, after studying at King's College, London, and contributed designs to an illustrated copy of Tennyson's poems. In 1849 he exhibited "The Girlhood of the Virgin," a picture in Pre-Raphaelite style, to which he was one of the first to attach himself. He exhibited "Fair Rosamond" at the Scottish Academy in 1860. In literary works he has published "The Early Italian Poets," "Translations from Dante," "Dante and his Circle," and poems. Died April 9th, 1882.

Rossie, Baron. See KINNAIRD.

Rossini, Gioacchino Antonio. Famous Italian opera composer, b. at Pesaro, Feb. 29th, 1792; his father being the "town trumpeter," and afterwards player in an orchestra, his mother a public singer. Rossini himself became a horn-player, and also sang in the local theatre of Bologna. In 1807, his voice having broken, he learnt the violin-cello, and worked hard at composition. His first public opera appeared at Venice, in 1810, "La Cambiale di Matrimonio," and had some

success. Many operas followed. "Tancredi" (Venice, 1813) placed Rossini at the head of operatic writers. He ceased to write by an extraordinary caprice after producing "Guillaume Tell" (Paris, 1829), and produced nothing during the rest of his long life, except the "Stabat Mater" (1842), and the "Messe Solennelle" (1864). Of the thirty-eight operas he wrote, the following are among the finest: "Barbieri di Siviglia" (1813), "Otello" (1816), "Mose in Egitto" (1818), "Semiramide" (1823), "Tell" (1829). He died in 1868. He visited England under the patronage of George IV., 1824.

Rosslyn, Francis Robert St. Clair-Erskine, 4th Earl of (creat. 1801); Baron Loughborough (1795); b. 1833; succeeded his father 1866. Was Ambassador Extraordinary to Madrid on the occasion of the marriage of the King of Spain (Jan. 1878).

Rossmore, Derrick Warner William Western, 5th Baron (creat. 1796); Baron Rossmore (1838), by which title he holds his seat in the House of Lords; b. 1835; succeeded his brother 1874.

Rothschild, Baron Ferdinand James de, M.P., of Waddesdon Manor, Bucks, second son of Baron A. de Rothschild, of Frankfurt, b. 1842. He is J.P. and Deputy Lieutenant for Buckinghamshire; High Sheriff (1883). On the elevation of Sir N. M. de Rothschild to the peerage, Baron Rothschild was returned for the Borough and Hundreds of Aylesbury (July 1885), in the Liberal interest, and was elected for Mid Bucks at the recent election (1885).

Rothschild, Messrs. See CHINESE LOAN, NEW GREAT.

Rothschild, Nathaniel Mayer de Rothschild, 1st Baron (creat. 1885), eldest son of the late Baron Lionel Nathan de Rothschild; b. 1840; succeeded in 1876 his uncle the 1st Bart., who came to England in 1800. Was M.P. for Aylesbury (July 1865 to June 1885, when he was raised to the peerage).

Rouen. See FRANCE.

Roumania. Formerly the autonomous provinces of the Ottoman empire, Moldavia and Wallachia; now a kingdom under Charles I. of Hohenzollern-Sigmaringen, in whom resides the executive power. The legislature is composed of a Senate of 120 members, elected for eight years, and a Chamber elected for four years by all male citizens paying taxes. Education is free and compulsory, but still in a backward condition. Area about 45,642 square miles, with a population estimated at about 5,100,000. Revenue and expenditure in 1884-5 about £5,211,000. Debt in 1885 £30,000,000. Army, in peace about 20,000, in war about 150,000. Navy about 20 small vessels, chiefly for purposes of Danube police. In 1874 Austria, Germany, and Russia, in spite of the objection of the Porte, claimed the right to make separate treaties with Roumania. In 1877 the country, in alliance with Russia, took part in a war with Turkey (*q.v.*). At the close of the war Roumania was declared independent, received the Dobrudscha, and gave up Roumanian Bessarabia to Russia, from whom it had been obtained in 1856. In March 1881, Roumania was proclaimed a kingdom, and as such recognised by the Powers. In March 1883 the powers of the European Danubian Commission were by treaty extended to Ibrail and the Kilias arm, and prolonged in time, Roumania protesting against the presidency of Austria in the commission. (See also AUSTRO-HUNGARY.)

Round, Mr. James, M.P., of Birch Hall, Colchester, was b. 1842. Educated at Eton and Christ Church, Oxford, where he graduated M.A. Called to the bar at the Inner Temple (1868). Returned in the Conservative interest as member for East Essex (1868-85); North-East Essex, Harwich Division (1885).

Rous, Admiral. See TATTERSALL'S.

Rousseau, M. See PANAMA CANAL.

"Roving Englishman." See NOMS DE PLUME.

Rowton, Montagu William Lowry-Corry, C.B., 1st Baron (creat. 1880), younger son of the late Right Hon. Henry Thomas Lowry-Corry, M.P., sometime First Lord of the Admiralty; b. 1838. Called to the bar (1863); appointed private secretary to the late Earl of Beaconsfield (1873), and accompanied that nobleman on his mission to the Congress at Berlin (1878), as acting secretary of Embassy.

Roxburghe, James Henry Robert Innes-Ker, 7th Duke of (creat. 1707); Earl of Innes (1837), by which title he holds his seat in the House of Lords; b. 1839; succeeded his father 1870. Was M.P. for Roxburghshire (1870-74). The 1st peer accompanied James VI. to England, and was Lord Privy Seal in the reign of Charles I.

Royal Agricultural Society. See DAIRY FARMING.

Royal Albert Hall Choral Society. See MUSIC FOR 1885.

Royal Aquarium. See AQUARIUM.

Royal Assent. See PARLIAMENTARY PROCEDURE.

Royal Commission on City Companies. See CITY GUILDS.

Royal Commission on Crofters. See CROFTERS.

Royal Commission on Defence of British Possessions and Commerce. See BRITISH COALING STATIONS.

Royal Masonic Benevolent Institutions and Funds. See FREEMASONRY.

Royalties are payments which the lessee or producer agrees to make to the patentee, author, artist, or owner of a patent, copyright, mine, etc., in consideration of the right of working the same to his own advantage. In the case of copyrights and patents, the "property" in the right frequently passes to the lessee thereof, notably in questions of copyright (*q.v.*).

Royalty, Deceased, 1885. See OBITUARY (APPENDIX).

Royden, Mr. Thomas Bland, M.P., of Holmfield House, Aigburth, was b. 1832. Educated at Liverpool Coll. Member of the Liverpool City Council (since 1873), Mayor (1878-9). Is a J.P. for Liverpool. Returned in the Conservative interest as member for West Toxteth Division, Liverpool (1885).

Rubinstein, Anton Gregor, great pianoforte virtuoso, was b. near Jassy, 1829. His parents were Russian Jews. At the age of twelve he played in London, which he visited again in 1857, and on other occasions. As a composer Rubinstein is very prolific. He has written charmingly for the pianoforte alone, and with other instruments; his "Ocean Symphony" is the best of several such works for full orchestra; and for the stage he has composed many operas, the most esteemed being the "Demon," "Dimitri Donskoi," and "Nero." He founded the Conservatoire at St Peters-

burg in 1862, and is indefatigable in promoting Russian music. The late Czar ennobled him in 1869 as a mark of his appreciation and esteem.

Ruckschlag. See HEREDITY.

Ruck's Water Gas. See ILLUMINANTS.

Rudimentary Organs. See ORIGIN OF SPECIES.

Rules of Procedure. See PARLIAMENTARY PROCEDURE.

Runjeet Singh. See SIKHS.

"Runnymede." See NOMS DE PLUME.

Rural Dean. See DEANS.

Rusdem Pasha. His Excellency the new Turkish Ambassador, who succeeded Musurus Pasha (*q.v.*) at the Court of St. James', 1885. Entered the civil service of the Porte at an early age, and quickly attracting the notice of his chief, was advanced to the important post of *Derislerdjunani* (interpreter of the Captain Pasha), and sent on several important missions to Europe, Egypt, and Tunis. In 1848 he accompanied as secretary Tuad Pasha, the High Commissioner, to Moldavia, and also to Epirus and Thessaly. Appointed Secretary-General to the Foreign Office, Rusdem Pasha reorganised that department on the Western basis, introducing French for all official correspondence. Was appointed (1856) *Chargé d'affaires* to Turin and the Italian court; afterwards Minister-Resident and Minister Plenipotentiary. Ambassador Extraordinary to Russia, at which court he was a *persona grata*. Represented the Sultan at the coronation of the present King of Sweden. Governor-General of the Lebanon (1873), the tenure of this office being fixed by a protocol signed by the Powers at ten years. It was in this capacity Rusdem Pasha became best known to the British Government. Returning from the Lebanon (1883), he remained at the court at Constantinople. The Sultan on two occasions sought to employ Rusdem Pasha in the capacity of Governor-General of one of the great autonomous provinces of Eastern Roumelia and Crete; but his religion (his Excellency is a member of an Old Catholic family) barred the way to his appointment. Towards the close of 1885 he obtained the highly important post of Ambassador to England. Rusdem Pasha is one of the highest dignitaries of the Ottoman Empire, and is a Vizier and a Muchir, and possesses the highest class of every Turkish decoration, besides the grand cordon of many European orders.

Ruskin, John, M.A., LL.D., b. in London 1819. Educated at Christ Church, Oxford; where he gained the Newdegate prize for poetry ("Salsette and Elephanta"), 1839. Having early developed a taste for art, he studied with great success under Copley Fielding and Harding, and having become enamoured of Turner's paintings, then but little appreciated, he commenced a letter in defence of Turner, in response to an attack made on him in *Blackwood's Magazine*. This developed into the celebrated work "Modern Painters," vol. i. (1843), which obtained a great success, though it evoked some sharp criticism on the part of those who dissented from his views. He resided for some time in Italy, and subsequently published the remaining volumes of "Modern Painters," making five in all (issued 1846-60). These contained valu-

able illustrations by himself, and the books are now rare. He had previously (1849) written "The Seven Lamps of Architecture" and "The Stones of Venice" (1851-53); both books have recently been reprinted—the former in 1880, and the latter in April 1886. He was appointed Rede Lecturer at Cambridge (1867), and Slade Professor of Fine Art at Oxford, (1872), but retired from this post in 1878 on the occasion of his illness. He again accepted the chair in 1883, which he finally vacated in 1885, owing to the action of the University on the subject of vivisection. He is a most voluminous writer, and has widely expressed his views upon almost every subject in the leading magazines and newspapers of the day. These contributions have been republished in a permanent form, under the editorship of "An Oxford Pupil," the first instalment being issued in 1880, under the title of "Arrows of the Chase," (2 vols.), and the remainder March 1886, under the title "On the Old Road" (2 vols). In addition to those mentioned above, his most notable works are: "Notes on the Construction of Sheepfolds" (1851), "Political Economy in Art" (1857), "A Joy for Ever," and "Two Paths" (1859), "Unto this Last" (1862), "Munera Pulveris" (1862), "Sesame and Lilies" (1864), "Ethics of the Dust" (1866), "Queen of the Air" (1868), "Crown of Wild Olive" (1868), "Aratra Pentelici" (1870), "Eagle's Nest" and "Ariadne Florentina" (1872), "Time and Tide," and "Val D'Arno" (1873). In 1871 he commenced his well-known series of letters entitled "Fors Clavigera," which appellation he explained in a threefold sense as meaning "Deed, Patience, and Love," and dealing in a conversational form with almost every variety of subject. These came out regularly for ninety-six numbers, being finally closed in December 1884. Since that time he has been engaged upon his autobiography, which he is bringing out periodically under the title of "Proserpina." In addition to this he has several works in progress which have appeared irregularly from time to time for several years past—namely, "Deucalion," "Proserpina," "St. Mark's Rest," "Laws of Fesole," "Our Fathers have told us," etc. He has also edited "Bibliotheca Pastorum" (Shepherds' Library), in 4 vols., "Roadside Songs of Tuscany," etc., etc.

Russell, Sir Charles, Q.C., M.P., was b. 1833. Educated at Trin. Coll., Dublin. Called to the bar at Lincoln's Inn (1859). Appointed Q.C. and elected Bencher of Lincoln's Inn (1872). Returned in the Liberal interest as member for Dundalk (1880-85); South Hackney (1885). Attorney-General in the present Gladstone administration (Feb. 1886), and has received the honour of knighthood.

Russell, Mr. Edward Richard, M.P., was b. 1834. Editor of the *Liverpool Daily Post*. Formerly President of the Literary and Philosophical Society of Liverpool. He is a Governor of Univ. Coll., Liverpool. Returned in the Liberal interest as member for Bridgeton Division, Glasgow (1885).

Russell, Francis John Stanley Russell, 2nd Earl (creat. 1861), son of the late Viscount Amberley; b. 1865; succeeded his grandfather, 1st Earl Russell (the well-known statesman) 1878.

Russell, Sir George, M.P., of Swallowfield Park, Reading, was b. 1828. He was educated at Eton and Oxford, and was called to the bar

at Lincoln's Inn (1853), joining the Oxford Circuit. Sir G. Russell is Recorder of Wokingham, and was formerly Judge of County Courts in Derbyshire and in Kent. He married (1867), Constance Charlotte Elizabeth, daughter of the late Lord Arthur Lennox and niece of the late Duke of Richmond. Sir George succeeded to the baronetcy on the death of his brother, the late Sir Charles Russell, in 1883. He was returned as Conservative member for East Berkshire (1885).

Russell, Dr. W. H., b. at Lily Vale, co. Dublin, b. 1821. Entered Trin. Coll., Dublin, and while there commenced his connection with the *Times*, by reporting Irish Elections. In 1843 he became one of the chief reporters for this paper; was called to the English bar (1850), was correspondent of *The Times* in the Crimea (1854-55), and was engaged in similar capacity during the progress of the Indian mutiny (1857-8), and its suppression, which afterwards was fully described in "My Diary in India." In 1861-2 he was in the United States as correspondent of *The Times* during the civil war of Secession. In 1866 he corresponded with *The Times* from the Austrian head-quarters during the Prusso-Austrian war. In the Franco-German war (1870-71) he was correspondent at the head-quarters of the Crown Prince. In 1878 he established the *Army and Navy Gazette*, of which he is still editor and proprietor. He published "History of the Crimean War," "My Diary in India," "My Diary North and South," "Memorials of the Marriage of the Prince of Wales," "Review of Tottleben's 'History of the Defence of Sebastopol,'" "Canada, its Defences, Condition, and Resources," "Diary in the East—Tour of the Prince and Princess of Wales," "My Diary during the Last Great War" (1870-71), along with minor works extracted from his contributions to periodicals.

Russell Gurney's Act. See TRADES UNION.
Russia. An empire under Alexander III., Alexandrovitch. An autocracy, the Tzar being the supreme ruler and legislator, and the only source of power in the body politic. The administration is divided into eleven departments, with a minister at the head of each, nominated by the Tzar, each being separate and independent in its respective branch. The State Council, a permanent body composed of a number of high officers nominated by the Emperor, and presided over by a member of the imperial family (now by the Tzar's uncle, Grand Duke Michael Nicolaevitch), institutes and elaborates all laws. The State Council has only a consultative voice, its opinions being presented for the decision of the Emperor, who agrees either with the majority or the minority. The State Council has no right of proposing any new law or measure *motu proprio*, the right of initiative belonging to the respective ministers acting under the direct supervision of the Emperor. The Senate of the empire, which formerly united the attributes of the State Council and the present Ministry of Control, is now only a superior court of appeal. Ecclesiastical concerns are administered by the Synod, a body of high church dignitaries, controlled and directed by the "Procurator of the Holy Synod"—a civil or military general representing the civil power, to whom the Synod is completely subjected. The Government does not interfere with the doctrinal questions of the orthodox Greek Church (*q.v.*), nor is the Tzar the Pope of the

Russian Church, as is sometimes erroneously affirmed. Local administration emanates from the central governing body. Russia is divided into sixty-three provinces, fourteen regions—having each at its head a governor, and possessing representatives of juridical and ecclesiastical power. The Grand Duchy of Finland is the only country in the Tzar's dominions possessing a species of home rule. The four orders send their deputies for a short legislative session every five years. Though dependent on the will of the Tzar in its general functions, the Finnish representative body and the Senate possess important immunities in the right of nominating, directing, and controlling the local administration. After the emancipation of the serfs (1861) the popular element was, in a limited degree, introduced in some branches of public function in Russia Proper. The jury was introduced for common crimes (1864), after the French pattern, the grand jury being suppressed, the power for the detention of criminals belonging absolutely to a number of agents of the Government. In the same epoch some eight provinces of Russia Proper received a kind of local self-government—"Zemstvo" (1864), extended gradually to thirty-four provinces. The three orders—landlords, citizens of the towns, and peasants—united in separate assemblies, return their respective deputies to the District Zemstvos, each of which sends a delegation forming the Provincial Zemstvo. The sessions of both the District and Provincial Zemstvos are short—ten to fourteen days; but every three years they nominate the "Ouprava," a permanent responsible commission, administering affairs in obedience to the Assembly's instructions. The influence of the Zemstvos are very contracted, and they are dependent upon the governor of the province and their presidents nominated by the ministry. The towns, though sending their deputies to the Zemstvos, have a municipal self-government of their own, granted by the law of 1870. The right of voting belongs to the freeholders and tradesmen inscribed in the guilds. The town electors are divided into three parts, so that the amount of taxes paid by each shall be about one-third of the total amount of taxes paid by the town. Each of these three classes of electors, though differing greatly in number, send an equal number of deputies to the municipal assembly, called "Duma," which nominates for four years an executive committee, "Ouprava," and the mayor, "Golova," which must be approved by the Government and is then no more revocable by the Duma, and possesses the right of suspending its resolutions, being responsible only to the governor of the province. The rural population, set free by the Act of Emancipation of 1861, is endowed with a small piece of land, for which they have to pay mortgage tax for forty-nine years. The bulk of the Russian peasantry hold their land as common property, subdividing it by families after certain periods, according to the number of working people in each family. The rural population is constituted in "volost" (parishes), subdivided into village communities, "mir," "gromada," having their own self-governing assembly, and electing their executive headmen, "Starshinas" and "Starosts," which are, however, dependent on the inferior police agents, who have the right of dismissing and punishing them. The area of Russia is

Europe is 2,095,504 square miles, with Asiatic possessions 8,644,100 square miles. The pop. of Russia in Europe is about 87,105,089. With her Asiatic dominions it was (in 1885) about 103,000,000. The population increases more than 1,000,000 every year. The **Slavs** constitute more than two-thirds of the population (about 68,000,000), of which 5,000,000 are Poles and 17,000,000 Ruthenians. The **non-Slavs** are represented by the Lithuanians, Finns, Germans, Tartars, and Jews. The State religion is Greek Church. The number of Greek orthodox faith is about 64,000,000, of which about 15,000,000 are sectarian dissenters. The Catholics number about 8,500,000; Protestants, 2,750,000; Jews, 3,000,000; Mahometans, 2,500,000; Buddhists and other religions, 26,000. The Russian army is composed of (1) field or active army, (2) reserves, (3) militia. (1) The active army in time of peace numbers about 750,000, in time of war 917,904, including 55,905 cavalry, 141,969 Cossacks, and 3,778 guns. (2) The reserve of the active army consists of small bodies in time of peace, transformable into 544 battalions in time of war, equal to 455,000 infantry, with 144 batteries and 60,000 supplementary Cossacks. (3) The reserve proper, or the militia, as created by the regulations of 1876, was never summoned, being intended only for cases of extreme urgency. Of young men capable for service one-third are incorporated in the active army, and two-thirds are inscribed in the militia. The Russian navy is composed of 38 ironclads, 5 half-ironclads, 106 torpedo boats, 281 steamers, and 35 sailing vessels, besides 3 large ironclads constructing. The navy numbers 29,660 sailors, including 3,196 officers. Russian finances are derived chiefly from the taxation of the lower classes, the peasants paying about 83 per cent. of the taxes. The average revenue for the five years 1881-85 was 708,342,657 roubles (the rouble = 2s.); the average expenditure for the same period was 721,675,729 roubles, making an **average yearly deficit** of 13,333,072 roubles. The national debt, which in 1870 was but 2,003,488,160 roubles, in 1884 reached 5,234,000,000 roubles. The interest for the national debt increased from 85,000,000 roubles, in 1871, to 260,482,741 in 1885, which is due partly to the increase of the debt, partly to the depreciation of Russian roubles. In 1871 100 roubles were equal to £15.88, in 1885 £9.83. Russian **commerce** with foreign countries is represented by a total of about 600,000,000 roubles exports, and about the same amount of imports, the latter exceeding the former less than 1 per cent. for the five years 1878-82. The exports are almost exclusively raw and agricultural produce, three-fourths of which are sent from the Baltic and southern seaports, chiefly to England and France. On the Asiatic frontier, however, Russian exports consist of manufactured wares; and here commerce is constantly and steadily increasing. From 1879 to 1883 the exports were augmented from 627,768,000 to 640,295,000 roubles, and the imports from 557,257,000 to 587,713,000 roubles. On the opposite frontier, the European, commerce is not so prosperous. Owing to the unsatisfactory condition of its agriculture, Russia cannot profit as it might by the enormous increase of the demand for imported corn in western countries. Russia has lost its supremacy as a corn furnishing country, America having driven it from the best trade and the first place. In 1867

Russia furnished 33 per cent. of the corn required by England; in 1876, 14 per cent.; in 1880, only 8 per cent. With France (1875-80) the Russian supply has diminished from 27 per cent. to 22 per cent.; with Germany from 55 per cent. to 40 per cent. In regard to the progress of culture and the industrial development, there has been a very quick progress contrasting forcibly with the general depression manifested in the agricultural districts. From 1870 to 1883 the town population of the empire increased in the whole from 9,000,000 to 12,000,000. In 1870 the number of towns having more than 10,000 inhabitants was 185; in 1882 it was 305. In 1870 Russia numbered only six large towns consisting of more than 100,000 inhabitants; this number is now doubled. National industry is making considerable progress, though lately with less rapidity. While the agricultural interest remains almost stationary, the manufacturing industries from 1865 to 1881 have augmented five times in value, being about 300,000,000 roubles yearly, or about one-sixth of the value of agricultural products, reckoned at about 1,800,000,000 roubles. **Education**, notwithstanding the many obstacles to it, is making rapid progress. From 1871 to 1883 the number of students in the eight universities increased from about 6,200 to 12,600. The gymnasias, having in 1870 36,470 pupils, in 1881 numbered 60,240. Primary education is imparted in 28,400 schools, with 1,539,975 pupils, being about one pupil for every 83 inhabitants. The **political history** of Russia for the last fifteen years is signalised by intense internal conflict between the autocracy and the aspirations of the Russian people for political freedom, due to the quick intellectual enlightenment, as well as to industrial and commercial development (see **NIHILISM**). The same period was very rich in various external events.—1871. Profiting by the entanglement of France and the friendship of Germany, Russia tore up the treaty of Paris (March 30th, 1856), declaring it (October 4th, Prince Gortchakoff's note) no more binding on her as regarded having a military fleet on the Black Sea. In June 1872 General Kaufmann, in continuing the warlike exploits of Tcherniaeff, invaded the khanate of Khiva, and occupied the capital. Peace concluded in July of the same year replaced the khan on the throne, but under a strict Russian protectorship. In August 1875 a war with Kokand took place, and the khan Nazar ed Din was reduced to the same dependent condition. But a national revolution (Oct. 1875) against the khan burst out, headed by Abder Ahman, who, after a long resistance, was completely routed by General Skobelev, and the khanate was incorporated in the Russian empire March 1876. Next month Skobelev defeated and conquered the Kara Khirghises. In the meantime, on the Balkan Peninsula the rising of Herzegovina peasants, which began in July 1875, opened the way to most portentous events. In July 1876 the two autonomous Slav states of the peninsula—Serbia and Montenegro—declared war against Turkey. Warmly supported by Russian volunteers and Russian money, the Servian troops, headed by General Tcherniaeff, were, after some partial successes, completely routed by the Turks (August 1876), and Servia concluded peace with the Sultan. Montenegro sustained alternately defeats and victories. A conference of the representatives of the great

Powers met at Constantinople in the winter of 1876. But failing to come to any decision, Russia declared war against Turkey, and on April 24th, 1877, the Russian advanced posts crossed the frontier. In the spring of 1877 the army crossed the Danube. First successes were followed by severe disaster on the Balkan mountains, and for a long time the Russian army was held in check by the defences of Plevna in the autumn of 1877, finally overcome in 1878. The threatened advance on Constantinople was met by the British troops at Gallipoli. The San Stefano preliminary treaty of peace (March 3rd, 1878), was subjected to the approbation of the Berlin Congress (concluded July 13th, 1878), which remoulded it considerably in favour of the Turks. Half of Bulgaria received autonomy. The other, under the name of Eastern Roumelia, remained under the rule of a Turkish governor. Russia received the province of Kars, in Asia Minor, and a tract of land ceded to her allies, the Roumanians, after the Crimean war, as compensation. Hostilities on the Central Asian frontier recommenced in 1879. An expedition against the Turkoman Tekkes was undertaken, but ended with a defeat of Russia. In May 1881 the attempt was renewed under General Skobelev, resulting in the subjection and almost extermination of the Tekke Turkomans. On March 13th, 1881, the Emperor Alexander was killed by the Nihilists, and Alexander III. ascended the throne, being crowned in May 1882. In February 1884 Merv was annexed. In March 1885 Penjdeh was occupied and annexed, which caused a serious strain on the friendly relations of Russia and England, the latter supporting the Ameer of Afghanistan. The commission for the delimitation of that frontier is at present (March 27th, 1886) continuing its labours. On September 18th a revolution broke out in Eastern Roumelia, proclaiming the union under Prince Alexander's rule of both Bulgarian halves and establishing the frontier which Russia asked at the San Stefano treaty and tried to obtain at the Berlin Congress. But as the revolution was carried out by a national party, hostile to Russian interference, the St. Petersburg government took a decidedly hostile attitude towards the revolution. The Tzar recalled the Russian officers who commanded the Bulgarian troops, and at the Conference of Constantinople (November 1885) insisted on the restitution of the *status quo*. After opposing the appointment by the Porte of Prince Alexander as Governor of Eastern Roumelia, Russia in conjunction with the

other Powers gave in her adhesion to the treaty of peace between Servia, Bulgaria and Turkey, which was signed March 3rd, 1886. Difficulties, however, arose in consequence of Russia's insistence that Prince Alexander's term of rule should be limited to five years, his reappointment being subject to the consent of the Powers. Prince Alexander having refused to accede to these conditions, a crisis ensued which has not yet passed, although the ambassadors of the Powers at the Conference, held at Constantinople April 5th, have provisionally confirmed the treaty, and have urged Prince Alexander to yield to their earnest representations. Great activity has been displayed during the last and present year in augmenting the strength of the navy, no less than twenty-six vessels of various types having been constructed. The Budget for 1886, presented at the close of the Russian year, showed an estimated ordinary revenue of 787,463,691 roubles, and an ordinary expenditure of 812,751,030 roubles.

Russo-Indian Question. See CENTRAL ASIA.

Rustchuk. A town of 40,000 inhabitants, on the right bank of the Danube, in Bulgaria, 245 miles north-west of Constantinople. The present Tzar of Russia commanded the Rustchuk column during the last Turkish war.

Ruston, Mr. Joseph, M.P., was b. 1835. Educated at Wesley Coll., Sheffield. Head of the engineering firm of Ruston, Proctor & Co., Sheaf Ironworks, Lincoln. Is J.P. for Lincoln. Mayor (1870). Returned in the Liberal interest as member for Lincoln (1885).

Ruthenians, Legislation. See AUSTRIAN REICHSRATH, ETC.

Rutland, Charles Cecil John Manners, 6th Duke of (creat. 1703); b. 1815; succeeded his father 1857. A Lord of the Bedchamber to the late Prince Consort (1843-46); M.P. for Stamford (1837-52), and for Leicestershire North (1852-57). The 3rd Duke's eldest son was the Marquis of Granby, who was distinguished as a military commander. The 4th Duke was Lord Lieutenant of Ireland (1784-87).

Rydal, Mount. See LAKE SCHOOL.

Rye. See CINQUE PORTS.

Rye, Mr. E. C. See BOOK TRADE.

Rylands, Mr. Peter, M.P., was b. 1820. Educated at Warrington Gram. Sch. He is a Director of Manchester and Liverpool District Banking Co. of Rylands Bros. (Lim.). Elected Mayor of Warrington (1853). Is J.P. for the county and borough. Returned in the Liberal interest as member for Warrington (1868-74); Burnley (1876-85); re-elected 1885.

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Saarbrück. See FRANCE.

Saccharimeters. See POLARISCOPE.

Sackville, Mortimer Sackville West, 4th Baron (creat. 1876), son of the 5th Earl de la Poer. Has held various Court appointments.

Sacred Harmonic Society. See MUSIC FOR 1885.

Saddlers, The Worshipful Company of. See CITY GUILDS, THE.

Sagasta, Signor Praxedes Mateo. Spanish ex-prime minister and statesman, was b. in 1827 at Torrecilla de Cameros. He was educated as an engineer in the School of Engineers at Madrid. From 1854 to 1856 he represented the town of Zamora in the Constituent Cortes. In 1856 he was compelled to seek shelter on French territory, having engaged in the revolutionary movement. He returned to his country and profession on an amnesty being proclaimed. He again conspired in 1866, and was again compelled to fly. He became Minister of State (1870-74), and in 1874 he was successively Minister for Foreign Affairs, Minister of the Interior, President of the Council, and Prime Minister (1881-83). His ministry was succeeded (October 11th, 1883) by one from the Dynastic Left, under the premiership of Señor José Posado Herrera. Señor Sagasta, on the resignation of the Canovas ministry at the death of King Alphonso (Nov. 23rd, 1885) resumed office as the head of a new Liberal ministry.

St. Albans, Right Rev. Thomas Legh Cloughton, D.D., 1st Bishop of (founded 1877); son of Thomas Cloughton, Esq.; b. 1808. Educated at Rugby, and at Trin. Coll., Oxford, of which he became a Fellow; Professor of Poetry (1852-57). Consecrated (1867) as Bishop of Rochester; translated to this see 1877.

St. Albans, William Amelius Aubrey-de Vere Beauclerk, P.C., 10th Duke of (cr. 1684); b. 1840; succeeded his father in 1840. Is hereditary Grand Falconer, and hereditary Registrar to the Court of Chancery. The 1st Duke was son of Charles II. by Eleanor Gwynn.

St. Asaph, Right Rev. Joshua Hughes, D.D., 70th Bishop of (founded 560); son of C. Hughes, Esq., of Newport, Pembrokeshire; b. 1807. Educated at Cardigan and Ystradmenrigh schools, whence he proceeded to St. David's College, Lampeter. Ordained 1831; consecrated Bishop of St. Asaph (May 1870).

St. Aubyn, Sir John, M.P., of St. Michael's Mount, Cornwall, eldest son of the late Sir E. St. Aubyn, was b. 1829, at Clowance. Educated at Eton and Trin. Coll., Cambridge. He is Deputy Special Warden of the Stannaries, of Devon and Cornwall, J.P. and Deputy-Lieutenant for Cornwall. Represented West Cornwall in the Liberal interest (1858-85); re-elected 1885.

St. David's, Right Rev. William Basil Jones, D.D., 119th Bishop of (founded 519); son of William Tilsley Jones, Esq., of Gwynfryn, Cardiganshire; b. 1822. Educated at Shrewsbury School and at Trin. Coll., Oxford; ordained deacon (1848), and priest (1853); Fellow and Tutor of Univ. Coll., Oxford

(1851-57); Select Preacher (1860-67); Prebendary of St. David's (1850-67); was also for some time Examining Chaplain to the Archbishop of York; D.D. (1874); consecrated to this see Aug. 1874.

St. Germain, Henry Cornwallis Eliot, 5th Earl of (creat. 1815); b. 1835; succeeded his brother 1881. Served in the navy, and was clerk in Foreign Office; was secretary to Earl Vane's special mission to St. Petersburg (1867). Sir John Eliot, who so resolutely opposed Charles I., was connected with this family. The 3rd Earl was ambassador to Spain, and held several offices of state.

St. Gothard Tunnel. See ENGINEERING.

St. Helena. See BRITISH COALING STATIONS.

St. Hilaire, Geoffroy. See NATURAL SELECTION.

"St. James's Gazette," daily (1d.), founded 1880, is a Constitutional organ which, while not distinctively adhocating the views of the Conservatives, is in sympathy with moderate progress and measures. It gives an epitome of the opinions of the London papers, with the usual foreign, home and commercial news of the hour. Editor, **Mr. James Greenwood.**

St. James's Palace Stakes. See RACING.

St. John, St. Andrew St. John, 15th Baron (creat. 1558); b. 1840; succeeded his father 1874; is descended from the same family as the celebrated Viscount Bolingbroke.

St. Leger Stakes. See RACING.

St. Leonards, Edward Burtenshaw Sugden, and Baron (creat. 1852); b. 1847; succeeded his grandfather 1875. The 1st Baron was the celebrated lawyer and judge, who was successively Lord Chancellor of Ireland and Lord Chancellor of Great Britain; he was author of several legal works of the highest authority, and was well known for the alteration he effected in the law relating to contempts of court, the conveyance of the property of infants, lunatics, mortgagees, etc.

St. Lucia. See BRITISH COALING STATIONS.

St. Matthew, Guild of. See GUILD OF ST. MATTHEW.

St. Oswald, Rowland Winn, 1st Baron (creat. 1885); b. 1820. Was a Lord of the Treasury (1874-80), and M.P. for N. Lincolnshire (1868-85).

St. Patrick, Order of. Established in 1783. Its abbreviation is K.P.; its badge a sky-blue ribbon, with motto *Quis separabit* ("Who shall separate?"). There are, at present, thirty-two K.P.'s, excluding the sovereign and the Lord Lieutenant of Ireland, who is the Grand Master.

St. Privat. See FRANCE.

St. Rollox Chemical Works, Glasgow. See WASTE MATERIALS, UTILISATION OF.

St. Vincent, Carnegie Parker Jervis, 5th Viscount (creat. 1801); b. 1855; succeeded his brother 1885. The 1st peer was the celebrated Admiral Jervis, 1st Earl St. Vincent, who was created a viscount, and granted £2,000 per annum for life, with £1,000 to go with the title.

St. Vincent, John Edward Leveson Jervis, 4th Viscount, mortally wounded at Abu Klea; was b. April 3rd, 1850. He entered the

army in 1871; served in the Zulu war, in the expedition against the Marrees in Southern Afghanistan in 1880, in the Boer war of 1881, and in the Egyptian campaign. The first Viscount commanded at the battle of St. Vincent (1797).

St. Vincent's Gulf. See SOUTH AUSTRALIA.

Sakalava. See MADAGASCAR.

Salic Law. That law of the French monarchy which disqualified a female from being sovereign. A similar law exists in some other kingdoms. The name is derived from that of the Salian Franks.

Salisbury, John Wordsworth, D.D., Bishop of (founded 1642), the eldest son of Dr. George Wordsworth, late Bishop of Lincoln; b. Sept. 21st. 1843, and educated at Winchester and New Coll., Oxford, where he graduated in 1865 with many and high honours, among which were the Chancellor's and Craven prizes. Ordained deacon in 1867 and priest in 1869, it is remarkable that until 1883 Dr. Wordsworth had no actual parochial office, though he did good work in various parishes; the whole time having been passed in University and College appointments. He was college tutor of Brasenose, Proctor, Grinfield lecturer, select preacher, Bampton lecturer, Examiner in the Theological Schools, Oriel Professor of Interpretation of Scripture. In 1883 he was appointed Canon of Rochester, and Bishop of Salisbury 1885. Dr. Wordsworth is a very popular moderate High Churchman, and is the author of several theological and classical works. He married the daughter of Mr. Henry Cox, of the Bodleian Library.

Salisbury, Robert Arthur Talbot Gascoyne Cecil, P.C., K.G., 3rd Marquis of (creat. 1789), was b. at Hatfield in 1830, a descendant of the Cecils, who took a high place among British statesmen during the sixteenth century. The present Marquis entered Christ Church Coll., Oxford, and—as Lord Robert Cecil—was elected for the family borough of Stamford (1853-68) when he entered public life. The fortunes of the Conservative party, to which he attached himself, were at a very low ebb; but during the years which passed before they attained to office, the young Lord Robert Cecil gave such evidences of political sagacity and power of debate, that he received a place in Lord Derby's ministry of 1866 as Secretary of State for India (1866-7), under the title of Lord Cranborne, which he assumed on the death of his elder brother. Owing to certain divergencies of opinion, Lord Cranborne separated himself for a time from his political associates; but on his taking his place in the House of Lords at his father's death in 1867, as Lord Salisbury, he returned to his old party associations and wonted activity of co-operation with them, and soon took rank as the foremost debater of the Upper House. During the years between 1868 and 1874, Lord Salisbury was elected Chancellor of the University of Oxford. He gradually assumed a high position of authority on Indian and foreign affairs; and when Mr. D'Israeli resumed office as Premier in 1874, Lord Salisbury resumed his office of Secretary for India (1874-78). He was despatched to Constantinople in the capacity of Minister Plenipotentiary in 1876 to take part in the Conference which was expected to settle the matters in dispute between Russia and Turkey. As the Conference failed to attain this result, the war between Russia and Turkey broke out, and was

ended by the treaty of San Stefano. Lord Salisbury accompanied Lord Beaconsfield to Berlin, as plenipotentiaries in the Congress which assembled there for the purpose of modifying the provisions of the Treaty of San Stefano. The action of the British plenipotentiaries at this Congress principally conducted to effect such modifications as were favourable to Turkey. Lords Salisbury and Beaconsfield took the leading part in this Congress, and returned to this country, bringing back "peace with honour," in the pregnant words of the latter. He was Secretary for Foreign Affairs (1878-80). Upon Lord Beaconsfield's death, in 1880, Lord Salisbury became the recognised leader of the Conservative party; and when the Gladstone Ministry resigned office in June 1885, Her Majesty summoned Lord Salisbury to Balmoral, and gave into his charge the formation of a new ministry, of which he was Premier as well as Secretary for Foreign Affairs. On the adverse vote of the Commons, Jan. 26th, 1886, Lord Salisbury resigned office.

Salis-Schwabe, Colonel George, M.P., of Rhodes, Middleton, Lancashire, was b. at Manchester, 1843. Educated at Univ. Coll., London. Is lieutenant-colonel and brevet-colonel 16th Lancers, having entered the army 1863. He served five years as brigade major of cavalry at Aldershot and the Curragh. Engaged on special service during the Zulu war. Colonel Salis-Schwabe is connected with the firm of Salis-Schwabe and Co., of Rhodes and Manchester. Married (1870), Mary Jaqueline, only daughter of the late Rt. Hon. Sir W. Milbourne James, Lord Justice of Appeal. Returned in the Liberal interest as member for Middleton Division, South-East Lancashire (1885).

Salonica, or "Saloniki," Turkey. A town and port at the bottom of a gulf of the same name, on the Ægean Sea; chief town of the Turkish "eyalet" (government) of the same name, forming the chief commercial outlet of the western part of the Balkan Peninsula, as Constantinople is that of the east. It is connected now by railway with Mitrovitz, not far from Novi-Bazar in Bosnia, held by the Austrian Government, and will presently be brought into connection with the railway system of the Austrian empire. The port is an excellent one, and independent of its importance as the terminus on the Ægean of the above railway system, the tract of territory of which it is the immediate outlet possesses great fertility—yielding wheat, maize, barley, rice, tobacco, cotton, hemp, wine, and oil, while silkworms are raised, and cattle, sheep, goats, etc., are reared. The town of Salonica has manufactures of carpets, silk, cotton, and morocco leather; and besides these exports grain, oil cakes, tobacco, wax, etc. The town is magnificently situated, rising from the port up the slopes of the hills, which assume a semicircular form around it. The principal river of this side of "Rumili," the Turkish name for the "Balkan Peninsula," the Vardar, flows into the Gulf of Salonica S.S.W. of the town, and is navigable for barges some distance into the interior. Salonica is regarded by the Ottoman Government and at the present moment used, as an important point of concentration of the military forces of the Empire for operations in its western portion, while it is considered to be an object of ambition to Austria, who is desirous to secure a commercial and a

strategical naval position, commanding the approaches to the Black and Mediterranean Seas and Constantinople. Salonica will probably come prominently into public notice should the re-opening of the Eastern Question result in war between Russia and Austria.

Saltersford, Baron. See **COURTOWN**.

Salters, The Worshipful Company of. See **CITY GUILDS, THE**.

Salt Lake City. See **MORMONISM**.

Saltoun, Alexander William Frederick Fraser, 18th Baron, in the peerage of Scotland, was b. 1851, and succeeded 1886. Is major and lieut.-col. 1st Battalion Grenadier Guards, and D.L. of Aberdeenshire.

Salisbury-Trelawny, Sir John, of Trelawne, Cornwall, d. Aug. 4th, 1885, in his 70th year. He was b. 1816. Sir John was returned as a Liberal (1843) for Tavistock, which he represented till 1852, and he again sat for that borough (1857-65). He represented the Eastern division of Cornwall (1868-74).

Salvation Army. A home and foreign missionary society with a military organisation, having for its object the salvation of the more degraded classes both at home and abroad, which it seeks to reach by special means, including out-door processions accompanied with banners, music, and by addresses in halls, theatres, and other public buildings. Originated in the year 1865 by William Booth, then a Methodist minister, on a visit to London, the movement was called the Christian Mission until, in 1878, the present name was adopted. The army is now established in seventeen countries and colonies, and has 1,001 corps, with 2,560 officers (or evangelists), and has some 90,000 members. Each corps is under the command of a captain and lieutenant; each district, or group of corps, is under a major; each division, or group of districts, is under a colonel; and each country or colony is under a commissioner; the whole being under the supreme authority of "General" Booth. All members of the army profess their entire devotion to the objects and aims of the movement, and are total abstainers, this being a condition of membership; and, in addition, it is compulsory that all persons who hold any commission from headquarters should be non-smokers. Twenty newspapers, four English and sixteen foreign, are published in connection with the organisation, of which the *War Cry*, issued twice weekly, is the official organ. Song-books, general orders, and numerous other publications for the use and guidance of the arm yare edited by "General" Booth. The revenue of the army for the year 1884 amounted to about £270,000, made up as follows:—central funds, £74,665; local funds, i.e., money received and expended by the various corps, about £135,000; foreign, £63,000. The doctrinal views professed by the "Army," chiefly Arminian, are set forth in detail in the "Doctrine and Discipline of the Salvation Army," prepared by "General" Booth. In connection with the army there exists a juvenile branch, the "Little Soldiers' Corps," consisting of 444 corps. The training home, Congress Hall, Clapton, E., for the preparation of officers for the army, has sent out since its formation 2,120 cadets. There are also homes for fallen women and for rescued convicts of both sexes, as well as a small orphanage for children. A "naval" brigade was also established in June 1885. The headquarters of the Army are situated at 101, Queen Victoria

Street, London, E.C.; book depôt (G. T. Horne manager), 8 and 9, Paternoster Square, E.C. There also exist other organisations on a military basis similar to the Salvation Army; among these may be mentioned the **Blue Ribbon Gospel Army**, organised (July 1882) by Rev. W. Baxter, editor of the *Christian Herald*, and occupies at the present time (March 27th, 1886), nearly 100 halls permanently in Great Britain, and 40 halls in Canada and the United States. It employs about 150 evangelists. Headquarters, 1, Bakehouse Court, St. Paul's, E.C. (See also **CHURCH ARMY**).

Samoa Islands. This group, in the western Pacific, consists of ten inhabited and two uninhabited islands, with an aggregate population of 35,000 souls; it lies north-east of the Fiji group (*q.v.*). The largest is **Savaii**, and is described as being twice the size of the Isle of Wight. Some interest was aroused in London on January 11th, 1886, by the announcement, cabled from San Francisco, that the Germans had annexed the group, and that anarchy was only prevented by the British and American consuls—who, however, protested energetically against the annexation. It is stated that before the Franco-Prussian war, a German firm of merchants, **Messrs. Godeffroy and Co.**, purchased much of the land in the islands, with a view of encouraging German emigration, and that the scheme was looked upon with favour till the above conflict caused it to be abandoned, at any rate to some extent. In 1877, the Samoan chiefs petitioned the British Government to establish a protectorate over the group, but this was refused. In 1879 Germany obtained a treaty securing privileges as great as those granted to any other country, and Great Britain and the United States followed suit. Two years later (1881) the matter of annexation was discussed in the Reichstag, who declined to take that step. Subsequently, however, in pursuance apparently of the colonisation schemes of that country, Germany appears to have been very active in this quarter, and in 1884 a treaty was entered into between England and Germany to respect the independence of the islands. In January 1885 New Zealand suggested annexation, but it was then found that the Samoan king and the German consul had concluded an agreement (Nov. 1884) which to all intents and purposes gave the latter supreme control. But on November 11th, 1884, the King of Samoa addressed a letter to the Queen of England, again asking for the establishment of British authority, and stating that he had signed the above treaty with the consul because he was in fear. The Governor of New Zealand, **Sir W. Jervois** (Jan. 6th, 1885), telegraphed that the Samoan parliament declined to ratify the agreement with the Germans, in reply to which the Earl of Derby, then the Colonial Secretary, cabled to say that on the previous Saturday Prince Bismarck had made a speech referring to the agreement existing between England and Germany with regard to Samoa, and that colonial action would be deemed a breach of the agreement, and might lead to German annexation. Notwithstanding these constant rebuffs, however, the Samoan parliament actually passed an Act for annexation to New Zealand, which reached the Government of the latter in March 1885, but no effect was subsequently given to it. The report of the annexation was to the effect that the German officials, on the plea of protecting their countrymen who

were trading there, frequently interfered in Samoan affairs, and so irritated the king and the chiefs that serious consequences were threatened. A party of sailors and marines from the German man-of-war *Albatross*, which had been in the neighbourhood some time, was then landed, and they hoisted their flag, the king and his supporters flying for safety. It was announced from Berlin (Jan. 13th, 1886), that no official account of the seizure had reached the Foreign Office; and while the agreements with England and the United States were referred to, it was added that the German squadron at Zanzibar had left in the direction of the Samoan group before any report of troubles in that quarter had reached Europe. A cablegram from New York of the same date (Jan. 13th), however stated that the American consul at *Apia* had telegraphed to announce the annexation, while it was added that the same official had written to his brother at San Francisco stating that he had frequently warned the United States Government of Germany's intention to seize Samoa. It was reported from Philadelphia, Jan. 26, that Capt. Churchward, the British Consul at Samoa, had arrived at San Francisco on his way home with despatches. He is said to have stated that the quarrel originated between the King and Herr Weber, head of a leading German firm, who had acquired some land in Africa. Weber would not resell the land for the previously stipulated price, and the Samoan Court was eventually accused of insulting the German Government, and the King was told not to display his flag anywhere in Africa. His ensign was eventually pulled down by Herr Stenbel, the German Consul, and a party of armed sailors.

"Sam Slick." See NOMS DE PLUME.
Samuda, Joseph D'Aguliar, formerly M.P. for the Tower Hamlets, d. April 27th, 1885. He was b. 1813. He was a member of the Institute of Civil Engineers, and for some time a Vice-President of the Institute of Naval Architects. He sat for the Tower Hamlets down to the last general election, when he was defeated.

Samuelson, Sir Bernhard, M.P., F.R.S., was b. 1820. He is an ironmaster at Middlesbrough-on-Tees, and a member of the Institution of Civil Engineers. Formerly chairman of the Royal Commission on Technical Instruction, and a member of the Royal Commission on Scientific Instruction. Knight of the Legion of Honour (1878). J.P. for Oxfordshire. Returned in the Liberal interest as member for Banbury (1859); re-elected (1865-85); Northern Division of Oxfordshire (1885).

San. See EGYPTOLOGY.

Sandhurst, William Mansfield. 2nd Baron (creat. 1871), was b. 1855; succeeded his father 1876. An officer in the Coldstream Guards, and 1880-85 Lord-in-waiting to the Queen. Holds office in the present Gladstone administration as Under-Secretary for War (1886). The 1st Baron was Commander-in-chief in India.

Sandown Race Meeting. See RACING.

Sandwich. See CINQUE PORTS.

Sandwich, Edward George Henry Montagu, 8th Earl of (creat. 1660), was b. 1839; succeeded his father 1884. M.P. for Huntingdon (1876-84). The 1st peer was a distinguished naval commander *temp.* Charles II.; and the wife of his grandson was the celebrated Lady Mary Wortley Montagu.

Sandys, Augustus Frederick Arthur, 4th Baron (creat. 1802), was b. 1840; succeeded his father 1863.

Sandys, Mr. Thomas Myles, M.P., Greythwaite Hall, near Ulverston, was b. 1837. Late of the 7th Royal Fusiliers, now hon. lieutenant-col. 3rd Batt. North Lancashire Regt. Returned in the Conservative interest as member for Bootle Division, South-West Lancashire (1885).

San Francisco. A city of the United States of America, in the State of California, situated upon the Pacific (or Southern) Ocean, near the mouth of the river Sacramento, at the extremity of a peninsula which forms one of the most admirable harbours in the world. It has derived its great commercial importance not only from its admirable position, but also principally from the discovery of gold in California. The entrance to the vast bay on which it stands, and which extends fifty miles inland, is called the "Golden Gate." The peninsula was first settled by the Spaniards in 1776. After 1848, when it was ceded to the United States by Mexico, gold was discovered in California, and San Francisco from that time increased in size and commerce with unprecedented rapidity. The principal exports, besides gold and silver, are wheat, barley, flour, wines, quicksilver, and wool. Manufactures of different kinds are carried on, employing a large number of hands; the wealth of the city being estimated to amount to \$500,000,000. The Great Central Pacific Railroad terminates near the city, at Oakland, on the east side of the bay of San Francisco. The climate is generally healthy, neither excessive heat nor cold existing. Lines of steamers run to Japan, Australia, Panama, Mexico, etc. It is estimated that the grain-fleet, leaving San Francisco annually, export 1,000,000 tons of wheat. The population, which in 1870 was 149,473, had in 1880 (the last decennial return), increased to 233,959.

Sanitary Conferences. See SANITATION.

Sanitation. Under this title is comprised a multitude of diverse topics—water supply, the disposal of sewage, of the dead, and of garbage; ventilation, wholesome food—anything, in fact, which relates to the health of the individual or of the community. In proportion to our progress during recent years in the sciences and arts has the attention of the public been directed to the question of sanitation. Numerous conferences on one or other of the branches relating to public health have been held during the past year, notably the *Leicester Sanitary Congress*; the *International Sanitary Conference*, such as met at *Constantinople* (1866) and in *Vienna* (1874), held at *Rome* in May (1885), the conferences held in connection with the *International Inventions Exhibition* at Kensington; and the periodical meetings held at the *Parke Museum of Hygiene*. The papers read at these meetings, and the discussions which have ensued were most able and interesting, but no theory of extreme novelty has, during the past twelve months, been enunciated, nor any startling plan connected with sanitation been propounded. The advocates of cremation (*q.v.*), of the burning of garbage, and the various adherents of the innumerable means of sewage disposal have actively championed their ideas, but have only travelled on the old lines laid down years ago, and have advanced no fresh reasons for their faith. The importance of a scrupulous obedience to the laws of sanitation

the infringement of which is invariably attended by a penalty, more or less severe, cannot be overestimated. As an example of the penalty thus exacted, may be instanced the devastation caused in 1885 in Marseilles and Toulon by the cholera (*q.v.*) In 1884 this dread disease had held high revel in these towns, and it was hoped that the terrible extent to which they had suffered would cause some effectual remedy to be found for conditions that had been proved to be pregnant with death. But the hope was delusive. Both Marseilles and Toulon were left much as they were before; and successive visitations of cholera will, apparently for years to come, mark them as fitting places for the destruction of mankind. Marseilles has an abundant water supply, but all private wells are not abolished, and the construction of houses and the habits of the people give ample opportunity for their pollution. Even in the houses in which a cistern exists, it is frequently placed in the closet, and is unfurnished with any trap to shut off communication with the sewer. But it is in the houses of the wealthier classes only that closets of any kind exist; for the rest the inhabitants make the open roads and streets the receptacle of filth of every kind. In Toulon the sanitary defects of Marseilles are repeated, and even considerably accentuated. The street is the sewer, the water in the gutters serves the double purpose of carrying away the sewage and of cleansing the houses. It is a matter for no surprise that the death-rate of Toulon is 33.8 per 1000—sanitary knowledge teaches it could not easily be less. From such a deplorable picture, and from such a terrible warning of the results of filth, we may turn with satisfaction to the England of to-day, and its freedom from the fatal disease which has destroyed the inhabitants of the French towns. The year 1885, which has now passed away, may be regarded as one of unusual healthiness as far as the United Kingdom is concerned, and the total deaths registered during the first three quarters of the year amount to rates which are below the average of the past ten years. The same may be said with regard to the mortality from zymotic diseases; indeed, the diminished rate under this specially preventable class of disease was a substantial one during the first nine months of 1885, and the fourth quarter returns have not affected this satisfactory result of our steady advance along the path of sanitary progress. But even in England many lessons have yet to be learned, and some of these, it is to be hoped, may have been matured by the close of the current year.

San Juan, Island of. See INTERNATIONAL ARBITRATION.

San Juan River. See NICARAGUA SHIP CANAL.

"San Marte." See NOMS DE PLUME.

San Stefano, Treaty of. See GERMANY.

Santley, Charles. The greatest baritone singer of the present day, b. at Liverpool in 1834. He studied in Italy, and on his appearance in London as a finished singer in 1857 at once took high rank. He has occasionally sung on the opera stage, but excels in oratorio.

Sarakhs. An important strategical point, 200 miles north-west of Herat. General Sir Chas. Macgregor, who visited this part of Khorassan in 1875, first insisted upon its military importance, pointing out that Sarakhs was

the key to an army advancing from the Caspian. General Sir F. Roberts also urged that the Afghan frontier, running from the Oxus to Sarakhs, should be rendered effective by the establishment of pickets along it. In 1884 Russia followed the annexation of Merv by occupying the east district of Sarakhs, and spread over the country to Penjdeh. Indian strategists attached importance, not merely to Sarakhs itself, but to the whole locality; for, so long as Persia retained it, Russia could not make the district a basis of operations against Afghanistan. The soundness of their view of the significance of the infringement of Sarakhs was demonstrated by the subsequent operations from it directed against Afghanistan, and by engineering works, which placed the water supply of the country under Russian control, and left the Persian fortress at their mercy. New Sarakhs, the Persian fortress on the left bank of the river, is an extensive structure, but being armed only with a few guns, and having only about 1,000 ill-armed soldiers to defend walls requiring 10,000, would readily succumb to an attack. Old Sarakhs, on the right bank, a few miles distant in the direction of Merv, is a Russian intrenched camp with a garrison ranging from 1,000 soldiers upward, according to the fluctuations of the political barometer. A telegraph exists between it and St. Petersburg, and the trans-Caspian railway is to be shortly extended to it from Askabad, distant 185 miles. The Sarakhs district is fertile, and now that the Turcoman raids have ceased, will, doubtless, rapidly develop. Merv lies about 100 miles on one side of it, and Meshed the same distance on the other. The river Hari Rud, or Tejend, as the Turcomans call it, on which Sarakhs is situated, washes Herat.

Sardou, Victorien, French dramatist, b. at Paris Sept. 7th, 1831. He first studied medicine, but afterwards became a littérateur. His first dramatic production, "*La Taverne des Etudiants*," was a failure, but his next works, "*Monsieur Garat*" and "*Les Prés-Saint-Gervais*," which he wrote for Dejazet in 1860, were a success. In 1861 his comedy "*Les Pattes de Mouche*" brought him prominently before the public. M. Sardou was elected a member of the French Academy in 1877.

Sartorius, Sir George Rose, G.C.B., the senior of the six Admirals of the Fleet, who take rank with Field Marshals in the army, d. April 13th, 1885. He was b. 1790. At the age of 11 he entered the navy as a cadet, and was present at the battle of Trafalgar as midshipman on board the *Tonnant*, and shortly afterwards was engaged on board the *Daphne* in the operations on the Rio de la Plate and the attack on Montevideo. As lieutenant of the *Success*, he commanded the boats of that vessel when in the face of a heavy fire they destroyed two French vessels near Castiglione and three barques under the Castle of Terracina (1810). He was also present at the taking of Ischia and Procida, where two gunboats were destroyed, at the capture of two French privateers, and was in command of a gunboat at the defence of Cadiz. As captain of the *Slaney* he was present at the surrender of Napoleon I. (1815) to the squadron under the command of Sir Frederick Maitland of the *Bellerophon*, and he conveyed the news of the surrender to England. In 1831 he was engaged by the Regency of Portugal, acting on behalf of the young Queen, to fit out and take the command

of a squadron to act against the usurper Don Miguel. For his services to Portugal he was made Viscount de Pudade, Count of Pentrafirme, a Knight Grand Cross of the Order of St. Bento d'Avis, and was decorated with the Grand Cross of the Order of the Tower and the Sword. He was restored to his English rank as captain (1836), which he had forfeited by foreign service; and six years afterwards he received the thanks of the President and Congress of the United States for his efforts to save the United States frigate *Missouri* from destruction by fire near Gibraltar. In 1869 he was made Vice-Admiral of the United Kingdom, and on July 3rd of the same year Admiral of the Fleet.

"Saturday Review, The," (weekly 6d.), founded November 1855, has long maintained a leading position for its fearless criticisms on subjects of political, literary, and social interest; treating these from an independent standpoint. Its reviews are also distinguished by the same characteristics. Editor, **Mr. W. H. Pollock, q.v.** (1883).

Saturn. See ASTRONOMY.

Saunders, Mr. William, M.P., was b. 1823. Founded the *Eastern Morning News*, the *Western Morning News*, and the Central News Agency. He is a Vice-President of the United Kingdom Alliance. Returned in the Liberal interest as member for Eastern Div. of Hull (1885).

Saunderson, Major Edward James, M.P., late Royal Irish Fusiliers, was b. 1837. Deputy Lieutenant and J.P. for Cavan; High Sheriff of Cavan (1859). Returned in the Liberal interest as member for Cavan (1865-74). Returned in the Conservative interest as member for North Armagh (1885).

Savala. See SAMOA ISLANDS.

Savorquan, Count de Brazza. See PIERRE.
Saye and Sele, Ven. Frederic Twisleton Wykeham-Fiennes, D.C.L., 16th Baron (creat. 1447 and 1603); b. 1799; succeeded his cousin 1847. Ordained 1823; became Archdeacon of Hereford (1863); is 20th in descent from Geoffrey Lord Saye, who was one of the twenty-five barons appointed to enforce the observance of Magna Charta. The 1st Lord Saye and Sele of the Fiennes family was Lord High Chancellor of England, and beheaded by Jack Cade's mob (1451).

Scale (Music). As described in the article PITCH, all musical tones are produced by vibrations (usually vibrations of the air), striking on the drum of the ear at a regular rate. Different tones, taken haphazard, jar amongst one another, but for every tone there is a group of others which will sound with it harmoniously, and which are in fact those tones whose rates of vibration are the $\frac{1}{2}$, $\frac{2}{3}$, $\frac{3}{4}$, etc., of the rate of the tone first selected. Thus, taking as a prime tone the note which is produced by 24 vibrations in a second, we find the following series of harmonious consonances, measured (by the Siren or other recognised means) at the rate of their vibrations per second:—

24	27	30	32	36	40
Unison.	Second.	Third.	Fourth.	Fifth.	Sixth.
		45	48		
		Seventh. Octave.			

These are named as above, and it is evident that the octave, the most perfect of these consonances, stands to the unison or prime as 2 to 1, the fifth as 3 to 2, the fourth as 4 to 3, the

third as 5 to 4, the sixth as 5 to 3, the second as 9 to 8, and the seventh as 15 to 8, this being their order of harmoniousness. We can also add a minor third (6 to 5), and a minor sixth (8 to 5), which are really inversions of the major sixth and major third respectively. (By "inversion" it is simply meant that the lower note of an interval is raised by an octave, so that its vibration number is doubled, and it becomes the upper note. The ratio 6 to 5 is the inversion of 5 to 3, and the ratio 8 to 5 of 5 to 4.) If we were to multiply the number 24 by 11, the product 264 would be the note "middle C" on the pianoforte at Scheibler's pitch, and the other numbers multiplied by 11 would in like manner give us the remaining notes of the series:—

c' d' e' f' g' a' b' c'

This we call the **major scale of C**; or, if we use the notes in other orders, as we must of course do in music, it is the **major key of C**, or the "key of C major." We get the **minor scale** (and minor key) by substituting the minor third and sixth for the major third and sixth, that is by using *e' flat* for *e'*, and *a' flat* for *a'*. The melodies formed by these scales are recognised as the same at any pitch, if precisely the same ratios between the notes are observed; and these particular melodies are said to be in **just intonation**. But if we are using keyed instruments, we are limited to one key; in our instance to the key of C. For let us move to the key of G with the notes we have hitherto used, and at the very first step of the scale we find ourselves out of tune; because whereas C : D is 24 : 27, G : A is 36 : 40. The first notes are as 8 to 9, the second as 9 to 10. So it is with the rest of the scale, it is all out of tune. What is the remedy? The remedy lies in altering all the ratios of **just intonation** (except the octave) very slightly, so that one note may serve in several keys fairly well, though in strict truth it is not accurately in tune in any. All our keys are equally (slightly) out of tune, and the melody of our scales is (slightly) altered. To ordinary careless ears the difference is imperceptible, but it is the cause why the perfect quartet of violins or voices is so superior in sweetness to other music, since they alone can be played accurately in tune. The altered tuning above described is called the **tempered scale**; and since it is used for pianofortes, organs, and all instruments with fixed scales, it is almost universal. The octave is divided into 12 semitones, and these are precisely equidistant, so that any one of them can serve as a key note, and the series of 12 sounds becomes always the same, begin where you will. In this way alone is it possible to play in all keys on instruments with pianoforte keyboard, viz., having 12 keys to each octave. To approximate to **just intonation**, 117 keys to each octave would be necessary; that is, for an ordinary pianoforte, 820 keys in all.

Scarborough, Aldred Frederick George Beresford Lumley, 10th Earl of (creat. 1600), was b. 1857; succeeded his father 1884. The 1st Earl was a military commander, distinguished at the battle of Sedgemoor (1685).

Scarsdale, Rev. Alfred Nathaniel Holden Curzon, 4th Baron (creat. 1761); was b. 1831; succeeded his uncle 1856. Is rector of Kedleston, Derbyshire.

Scheldt River, The. See ENGINEERING.

Schliemann, Dr. Heinrich, celebrated German archaeologist and author, was born in

1822 at Neubukow, in Mecklenburg. In 1859 he travelled over the Continent, Syria, and Egypt. In 1866, when in Paris, he applied himself closely to archaeological studies, after which he visited the island of Ithaca, and then proceeded to Asia Minor. In 1870 he started excavations in the hill Hissarlik, where he made wonderful discoveries. The archaeological treasures he excavated belonging to Turkish territory, he was compelled to pay £2000 for to the Ottoman Government. He brought them to London and placed them in the South Kensington Museum. Dr. Schliemann afterwards presented them to the German nation (1881). His subsequent researches were most successful, and brought to light splendid specimens, especially from Mycenæ and Tiryns. In the pursuit of his investigations, he unearthed a Cyclopean city in Ithaca, followed on at Troy, and obtained valuable relics of Bœotian Orchomenos. He has written important works in several languages on his archaeological discoveries. Dr. Schliemann is justly considered one of the greatest of living linguists and archaeologists. It was announced from Berlin (*Times*, March 4th, 1886) that Dr. Schliemann promises Berlin shall ultimately become the possessor of his archaeological treasures.

Schnadhorst, Mr. W. F., b. at Birmingham 1840, received his education at the Grammar School of King Edward VI. He early entered political life, and (1870) was appointed secretary of the Central Nonconformist Committee. In his new office, his attention was soon directed to the subject of endowed schools, and to his energy and perseverance the agitation against the Endowed Schools Acts Amendment was mainly due. Mr. Schnadhorst was subject to a rigid and exhaustive examination on this question before the parliamentary committee appointed in 1873. In 1873 he was appointed secretary to the Birmingham Liberal Association, and his earliest work was the engineering of the school board election by which the Conservative was turned into a Liberal majority. The great organising powers of Mr. Schnadhorst, which were advantageously and successfully displayed in the principal elections, were specially recognised by the Liberal party by a purse of £1,000, and an address, which were presented by Mr. J. Chamberlain, M.P., on behalf of the Liberals of Birmingham, April 9th, 1877. After 1874, when the Liberals in Birmingham, with their effective system of organisation, maintained their supremacy at a time of general Liberal defeat, inquiries came from all parts of the country as to the nature of their organisation. From that time to 1877 Mr. Schnadhorst travelled the whole of the country, assisting in the work of organising the party on a popular representative basis. The next step was to bring all these newly formed associations into one great federation, with national aim and purposes; and from this suggestion was developed in 1877 the National Liberal Federation (*q.v.*), of which he was appointed secretary. The effect of this work of organisation throughout the country, and of the work which was carried out subsequent to the formation of the Federation, had a very large share in the bringing about of the great Liberal majority of 1880. The Federation, under Mr. Schnadhorst's guidance and care, has become one of the greatest political forces in the country. In the early part of 1884 Mr. Schnad-

horst resigned the office of secretary of the Birmingham Liberal Association, and was appointed chairman. In April 1885 he received a unanimous invitation from two of the new Birmingham divisions, South and East Birmingham, to stand for M.P., which he declined. The Liberals of Birmingham have, however, shown their confidence in him by unanimously electing him President of the "Two Thousand," in succession to Mr. George Dixon, M.P.

School Board for London. The Elementary Education Act of 1870 specially provided that a school board should be formed for London. The usual preliminary inquiry directed to be made in all other places (whether boroughs or districts) was dispensed with in the case of the Metropolis, because the educational destitution was notorious, and would brook no delay. The first board was accordingly elected only a few months after the passing of the Act, and included such men as Lord Lawrence, who became its chairman; Lord Sandon (now Earl Harrowby), Mr. Samuel Morley, Mr. W. H. Smith, Professor Huxley, the late Sir Charles Reed, Rev. A. W. Thorold (now Bishop of Rochester), etc.—**School Accommodation and Attendance.** The task before this Board was of the most difficult nature, since its first report to the Education Department showed that, on the most moderate calculation, there existed a deficiency of more than 100,000 school places, and proposed forthwith to meet this enormous deficiency. Then too, there was the ever growing increase of population to be dealt with, itself calling for an annual supply of twelve schools, each for 1,000 children. Its educational progress since 1870 will be seen by the following table, and also the "rate" at the end of each triennial period:—

	Rate at end of each Triennial Period.	School places provided.	No. on the Roll.	Average attendance.
1870	—	—	—	—
1873	·89	58,581	59,606	40,481
1876	2·97	146,074	146,031	114,380
1879	5·05	219,291	233,480	185,518
1882	5·90	280,275	295,833	238,205
1885	8	357,298	364,140	290,099

The following table shows the position of the **Voluntary Schools** during the same periods:—

	School places provided.	No. on the Roll.	Average attendance.
1870	261,158	221,401	173,406
1873	282,936	259,543	195,662
1876	287,116	259,436	199,605
1879	271,314	235,084	182,728
1882	263,617	223,297	174,723
1885	262,175	211,711	168,712

Taking into account the fact that voluntary schools, accommodating 48,000 children, have been transferred to the Board, the above tables show that the work of the Board has been accomplished without any serious detri-

ment to the attendance at the voluntary schools, notwithstanding the fact that the number of children now on the rolls of board schools alone is considerably greater than the total number of children on the rolls of voluntary schools in 1870. With regard to the rate, it should be stated that although it has constantly been increasing, the average cost per child shows but a slight fluctuation. The chief cause of the increase of cost must be looked for in the ever growing number of children, for whom the Board are compelled to make provision. The London Board labours under peculiar difficulties owing to the exceedingly high price of land, and the larger salaries paid in London, as compared with provincial towns. The buildings of the Board are well and substantially built, and improvements have from time to time been made as experience has proved their need. The health of the children has been carefully studied in such matters as lighting, warming and ventilating, under the hope that the care shown in all sanitary matters will have a great influence upon the health of the working classes of London. Outside the school building the Board have shown the same care of the children attending its schools. Extensive playgrounds have in most cases been provided, and wherever there is room, gymnastic apparatus also.—**Curriculum** (as prescribed by the New Code, 1885): reading, writing, and arithmetic (and needlework for girls), of course take precedence over all other subjects. The class subjects are singing, English, drawing, geography, elementary science, and history. Of these two are compulsory. Besides these there are specific subjects which are only taken by individual children in the upper classes of the school. With regard to the three Rs., it is satisfactory to note the progress which has been sustained for many years. The following table shows the results of the **examinations** at the end of each triennial period:—

	1873.	1876.	1879.	1882.	1885.
Reading ...	87'9	87'1	88'2	92'1	95'1
Writing... ..	83'3	83'7	84'7	90'0	89'2
Arithmetic ...	76'8	77'9	80'0	85'4	87'4

The **fees** charged by the Board (and sanctioned by the Education Department) range from 1d. to 6d. per week, with the exception of one school, where the fee is 9d. They are uniform in each department, and are, in each case, determined after regard has been had to the position of the parents. The number of **teachers** employed is 5,875: 2,007 male and 3,868 females. There are also about 1,000 pupil teachers.—**Compulsory Attendance at School.** The bye-laws of the School Board for London, made under section 74 of the Education Act of 1870, provide that children must attend a certified efficient school, or receive instruction in some other efficient manner. In order to enforce these bye-laws, and the additional regulations relating to education and employment contained in the Education Acts of 1876 and 1880, the Board have a staff of visitors (attendance officers) in each division of the Metropolis, whose duty it is to co-operate with the teachers

of **all efficient schools** in securing the attendance of children. Prosecutions are only ordered after all other means have failed to secure a child's attendance. The visitors also make inquiries in cases of non-payment or inability to pay school fees, and of applications for labour certificates, etc. The number of visitors at present employed in the Metropolis (including ten superintendents) is 263.—**Industrial Schools.** The School Board for London have availed themselves of the provisions of the Industrial Schools Acts and the Education Acts, relating to children wandering or not under proper control, or begging or not under proper guardianship, or persistently truanting from school, or charged with felony, etc., with a view to such cases being sent to industrial schools (a) under voluntary management, or (b) under the management of the Board. There are about fifty of the former schools with which the Board have agreements. There are also three of the latter schools: (1) a training-school ship on the Thames, (2) an industrial school at Brentwood, chiefly for cases not suitable for other industrial schools, and (3) a truant school for boys at Homerton. In the ordinary course children are committed until they attain the age of sixteen years, with power to the managers to license out to employment at an earlier age, if desirable. In the case of **truant schools** the children are licensed out, after a short detention, on condition that they attend an ordinary day school. The discipline while under detention has such a deterrent effect, that in the majority of cases, the boys attend school afterwards, but in case of failure the license is revoked and the boy taken back to the school for further treatment. Up to Midsummer, 1885, 9,899 cases had been sent to industrial and truant schools, and of these 7,165 had been discharged to friends, employment, etc., leaving at that time 2,734 children still in the school. Wherever possible the parents are called upon to contribute towards the maintenance of their children in these schools.—**Evening Classes** have now been established in every part of the Metropolis, and the last report of the Evening Classes Committee states that the results of the session 1884-5 are extremely satisfactory. The total number of pupils enrolled during the session was 6,853 males, 2,488 females—total 9346. The Board formerly consisted of 49 members, but the number is now fixed at 55. The election of the **sixth Board** took place in November 1885. (See APPENDIX for list of members.)

School Board for London, Financial Statement. See APPENDIX.

Schopenhauer, Arthur. The well known German philosopher of Pessimism; b. at Dantzig, February 22nd 1788, of a family of Dutch extraction. His father was a wealthy merchant, his mother the writer Johanna Schopenhauer. Much of his childhood was spent in France and England, and with the literature of these countries Schopenhauer was thoroughly familiar. In 1809 he went to the University of Göttingen, first studying natural science and history, subsequently philosophy. In 1811 he went to Berlin to attend the lectures of the philosopher Fichte. In 1813 he completed his first work, "Die Vierfache Wurzel des Satzes vom Zureichenden Grunde," and sent it to the University of Jena, which bestowed on him the title of Doctor of Philosophy. The following winter he spent at Weimar, where his

mother (now a widow) resided, meeting at her house, among other great men, the poet Goethe. From 1814 to 1818 Schopenhauer lived at Dresden. In 1819 appeared his chief work, on which he had long been engaged, "Die Welt als Wille und Vorstellung." An article on this book was published in the *Westminster Review* of April 1853, said to be from the pen of John Oxenford, in which for the first time the genius of Schopenhauer was recognised. Schopenhauer's main principle, as set forth in this work, Oxenford has thus condensed: "The world in itself is one great Will, constantly rushing into life." With regard to life Schopenhauer held that it was an unmixed ill, and that every sensible being should as soon as possible resolve himself into Nirvana—a principle he himself, however, did not act upon. In 1819 Schopenhauer travelled in Italy, returned to Berlin 1820, habilitating himself there as Professor, and giving some lectures, but failing to attract an audience. In 1822 he again went to Italy, came back to Berlin 1825, and settled down at Frankfort in 1831, where he continued to live an absolutely retired life till his death in 1860. He had borne with the ill of life seventy-two years, and was even then morbidly afraid of death. His chief works are: "Die Vierfache Wurzel" (1813), "Ueber das Sehen und die Farben" (1816), "Die Welt als Wille und Vorstellung" (1818), "Ueber den Willen in Natur" (1836), "Ueber die Freiheit des Willens" (1839), "Die beiden Grundprobleme der Ethic" (1841; a second edition, with a whole volume of "Additions," of his chief work (1844), and "Parerga und Paralipomena" (1851). A complete edition of his works has been issued by Dr. Frauenstädt. None are translated into English, but there is an account of his "Life and Works" by Helen Zimmern, the already mentioned article by John Oxenford, and many other critiques on his philosophy.

Schrader, Dr. See ASSYRIOLOGY.

Schubert, Franz Peter, great musical composer, b. at Vienna, 1797, was the son of a schoolmaster. He early showed his genius. At eleven he was sent to the *Convict*, a school where choristers were taught for the court chapel. He left the *Convict* at seventeen, and at once adopted the musical profession, writing masses, operas, songs, etc. In a year or two he was writing his very best, the "Erl King" itself dating from 1815. Schubert was a very clever and facile improvisatore, a fact which the state of the manuscripts of his fine symphonies and his splendid pianoforte trios show. In 1818 he accepted the post of music teacher with Count Esterhazy. Schubert was very little known, and his extreme shyness damaged his prospects not a little. He died 19th Nov., 1828. The total number of Schubert's published compositions of every sort is over 1,100; but he died in poverty at the early age of thirty-one.

Schulte, Prof. von. See OLD CATHOLICS.

Schumann, Robert, b. at Zwickau, Saxony, 1810. His father was a bookseller, who gave his son a good musical education. At his death (1826), for family considerations, Schumann, at the Universities of Leipzig and Heidelberg, studied law, but finally abandoned it in favour of music. His career as a pianist was closed by an injury to his hand (1830); he then devoted himself to composition, living much with Wieck at Zwickau. In 1834 Schumann started the celebrated musical paper

Neue Zeitschrift für Musik, which, by its critical acumen, changed the musical attitude of Germany. He continued to write for it till 1845. From 1836 to 1839 he wrote most of his pianoforte works of the true romantic school, and it was during this period that he formed an intimate friendship with Mendelssohn. He married Wieck's daughter Clara 1840. In 1841 he produced three symphonies, all of them masterpieces, as well as part of the splendid pianoforte concerto (finished 1845). The bulk of the quartets and chamber music appeared in 1842. The cantata "Paradise and the Peri," and part of "Faust," followed in 1843. Schumann's health temporarily broke down, and he accepted a professorship at Mendelssohn's Conservatoire at Leipzig. His "Faust" music was finished in 1848, and produced on the centenary of Goethe's birth in 1849, with enormous success. He became conductor of the great Düsseldorf concerts, 1850. In 1851 he grew extremely nervous at times, and in 1854, after an unsuccessful attempt at suicide, he was placed in a private lunatic asylum. He died in 1856. Practically, all that is distinctively German in the music of the present day may be traced to the compositions or the criticism of Schumann.

Scientific Men and Doctors Deceased, 1885
See OBITUARY APPENDIX.

Sclater-Booth, Rt. Hon. George, M.P., P.C., F.R.S., of The Priory, Oldham, was b. in London 1826. Educated at Winchester, and Balliol Coll., Oxford, where he graduated M.A. in classics (1847). Called to the bar of the Inner Temple (1851). Assumed the name of Booth (1857). Is J.P. for Hants, one of the Governors of Winchester Coll., and captain Hants Yeomanry Cavalry. Has held office as Parliamentary Secretary to the Poor Law Board (1867-68); Financial Secretary to the Treasury (1868); President of the Local Government Board (1874-80); one of the Chairmen of the Grand Committees; and also one of the Public Works Commissioners (1880-85). Mr. Slater-Booth is an Official Verderer of the New Forest (1877). Returned in the Conservative interest as member for North Hants (1857-85); re-elected 1885.

Scolecida. See ZOOLOGY.

Scotch Economic. See INSURANCE, FIRE AND LIFE.

Scotch Peers who are not peers of Parliament. The figures in brackets show the date when the title was created:—

Arbuthnott (1641), John Arbuthnott, 9th Visct., was b. 1806; s. 1860; entered the army in 1825, and is now hon. major on the retired list.

Belhaven and Stenton (1647), James Hamilton, 9th Baron, was b. 1822; s. 1875.

Borthwick (1452), Archibald Patrick Thomas, 21st Baron, was b. 1867; s. 1885.

Buchan (1469), David Stuart Erskine, 13th Earl of, was b. 1815; s. 1857. Was formerly captain 35th Foot, and is a D.L. of Linlithgowshire.

Carnwath (1639), Harry Burrard Dalzell, 11th Earl of, was b. 1804; s. 1875. Formerly colonel Bengal Artillery.

Dysart (1643), William John Manners Tolle-mache, 9th Earl of, was b. 1859; s. 1878. Is Lord Lieutenant of Rutlandshire.

Elstair (1643), Montolien Fox Oliphant Murray, 10th Baron, was b. 1840; s. 1871. Is a D.L. of Peeblesshire, and was formerly Commander Royal Navy.

Fairfax (1627), John Contée Fairfax, 11th Baron, was b. 1830; s. 1869. Is an M.D.

Falkland (1620), Byron Plantagenet Cary, 12th Visct., was b. 1845; s. 1886. Was major Royal Sussex Regiment, and is a retired hon. lieut.-colonel.

Lauderdale (1624), Frederick Henry Maitland, 13th Earl of, was b. 1840; s. 1884. Is major Bengal Staff Corps. (See PRIVILEGES, COMMITTEE FOR.)

Newburgh (1660), Sigismund Giustiniani Bandini, Earl of, was b. 1818; s. 1877. Is Prince Giustiniani Bandini in the Roman States, Duke of Montdragone in the late Kingdom of Naples. Was naturalised by Act of Parliament 1857. Is a Roman Catholic.

Perth and Melfort (1605), George Drummed, Earl of, was b. 1807; s. 1840. Is Duke de Melfort in France. Formerly captain 93rd Highlanders.

Queensberry (1682), John Sholto Douglas, 8th Marq. of, was b. 1844; s. 1858. Was formerly a representative peer for Scotland, but failed to secure re-election in 1880, as was understood, on the ground of his opinions upon religious matters.

Ruthven (1651), Walter James Hore Ruthven, 6th Baron, was b. 1838; s. 1864. Formerly captain Rifle Brigade.

Sempill (1489), William Forbes Sempill, 15th Baron, was b. 1836; s. 1844. Is J.P. and D.L. Aberdeenshire, and was formerly lieutenant Coldstream Guards.

Torpichen (1564), James Walter Sandilands, 12th Baron, was b. 1846; s. 1869. Formerly captain Rifle Brigade.

Scottish Peers. See HOUSE OF LORDS.

Scriveners, The Worshipful Company of. See CITY GUILDS, THE.

"Scrutator." See NOMS DE PLUME.

Scrutin d'Arrondissement. Single ballot system, whereby each *arrondissement* (district, parish, or ward) returns its own member for Parliament.

Scrutin de Liste. Multiple ballot system, whereby all the members who offer themselves for parliamentary election are put on the same list for the whole of the *département* (county) and returned at the same election.

Scrutin de Liste Bill, The. See FRANCE.

Sea Coal. See MINING.

Seafeld, James Ogilvie-Grant, 9th Earl of (creat. 1701); Baron Strathspey (1884), which title confers a seat in the House of Lords, was b. 1817; succeeded his nephew in the Scottish honours (1884), and was created a peer of the United Kingdom the same year. Was M.P. for Elgin and Nairn (1868-74).

Seale-Hayne, Mr. Charles, M.P., was b. at Brighton, 1833. Educated at Eton, he was called to the bar (1857). He is hon. lieutenant-colonel South Devon Militia, and J.P. for Devon and Dartmouth. Mr. Seale-Hayne was the first chairman of the Dartmouth and Torbay Railway Company (1857), and the first chairman of the Dartmouth Harbour Commission. Returned as member for Mid Devon in the Liberal interest (1885).

"Searche, John." See NOMS DE PLUME.

Seaton, James Colborne, 2nd Baron (creat. 1839), was b. 1815. Entered the army 1834; served in the field during the Canadian rebellion as aide-de-camp to his father; was military secretary in Ireland when his father was Commander-in-chief there (1855-60).

Second. See SCALE (MUSIC).

Secondary Currents. See DYNAMO.

Secondary or Mesozoic. See GEOLOGY.

Secret Cabul Correspondence. When General Sir F. Roberts penetrated to Cabul in 1879, he discovered a secret Cabul correspondence which had been carried on between General Kaufmann and the Ameer Shere Ali, inciting him against England and promising him Russian aid. References to this appearing in the press, the Gladstone Ministry were pressed to publish it, particularly as it justified, or was said to justify, Viceroy Lytton's policy. This request was refused, and in the midst of the controversy the *Standard* created a sensation by publishing the whole in its columns. Vain efforts were made to discover the discloser, although only three or four copies were in existence. If, as supposed, Earl Lytton was responsible for it, the correspondence certainly justified some of his measures, hitherto inexplicable. It provoked a strong public feeling against Russia.

Sedan. See FRANCE.

Seduction, Action for. This phrase has frequently given rise to misapprehension. English law does not give a right of action for seduction either to the woman seduced or to her parents. It only gives a right of action for seduction as occasioning loss of service; and where this has been occasioned, any one who stands to the woman seduced in the relation of master to servant may sue. Any slight service, such as milking the cows, making tea or nursing the children, will suffice to establish this relation. It must exist at the time of the seduction. Thus, if the woman at the time of her seduction have a home of her own, or be at service in some other person's house, her father has no action. But if she has been inveigled into a pretended service for purposes of seduction; if she be only absent from home on a visit, or is returning home after dismissal from service, then her parent has a right of action. Damages are estimated with reference not only to the loss of service, but also to the distress and dishonour brought upon the woman's family by her seducer. And evidence aggravating or palliating the guilt of the seduction and the harm done thereby is admissible.

Seely, Mr. Charles, M.P., was b. 1833. J.P. for Derbyshire and Notts, and Deputy-Lieut. for Notts. Lieut.-Col. 1st Notts Rifle Volunteers (the Robin Hoods). Largely engaged in the coal industry. Returned in the Liberal interest as member for Nottingham (1869-74, 1880-85); re-elected (1885).

Sefton, William Philip Molyneux, 4th Earl of (creat. 1771); Baron Sefton (1831), by which title he sits in the House of Lords, was b. 1835; succeeded his father 1855. Is descended from William de Moulines, who came to England with the Copqueror.

Selsmology. See EARTHQUAKES.

Selborne, Roundell Palmer, P.C., 1st Earl of (creat. 1882), was b. 1812. Is a member of the family of Palmer of Wanlip in Leicestershire; was called to the bar at Lincoln's Inn (1837); became Solicitor-general (July 1861); Attorney-general (Sept. 1863), resigned (July 1866); acted as counsel for the British Government in the decision of claims under the Washington Treaty (1871); was M.P. for Plymouth (July 1847 to July 1852, also June 1853 to March 1857), and for Richmond (July 1861 to Oct. 1872).

when he was created a peer); was Lord Chancellor of Great Britain (Oct. 1872 to Feb. 1874, and May 1880 to June 1885).

Select Committees. See PARLIAMENTARY PROCEDURE.

Sellar, Mr. Alexander Craig, M.P., was b. 1835. Educated at Rugby and Balliol Coll., Oxford, where he graduated (1856), 1st class Classical Honours. Called to the Scottish bar (1862); Legal Secretary to the Lord Advocate for Scotland (1870-74); member of the Royal Commission on Endowed Institutions in Scotland (1873). J.P. for Argyllshire. Returned in the Liberal interest as member for the Haddington Burghs (1882-85); Partick Division, Lanarkshire (1885).

Selwin-Ibbetson, Rt. Hon. Sir Henry John, Bart., P.C., M.P., of Down Hall, Essex, the only son of the late Sir John Thomas Selwin, was b. 1826. Educated at St. John's Coll., Cambridge, where he graduated M.A., and became a barrister. Sir H. Selwin-Ibbetson has held office as Parliamentary Under-Secretary of State for the Home Department (1874-78), and Joint Secretary to the Treasury (1878-80). Is a Deputy Lieutenant and J.P. for Essex. Returned in the Conservative interest as member for South Essex (1865-68); West Essex (1868-85); re-elected 1885.

Sentis. See BEN NEVIS OBSERVATORY.

Sepoys, the native Indian troops in the pay of the British Government. They have mutined on six important occasions; (1) 1764, when they demanded a large donation and increased rate of pay; (2) 1806, the Vellore mutiny; (3) 1824, the Barrackpore mutiny; (4) 1844, when Scinde became a British province, and other Sepoys thus lost their pay for service there; (5) 1850, when the Punjab was annexed by England as a province; (6) 1857, the year of the Indian mutiny.

September Convocation, The. See ITALY. **Septuagint Version.** See REVISED BIBLE.

Serrano y Dominguez, Marshal Francisco, b. at Cadiz Sept. 17th, 1810, d. Nov. 26th, 1885. Entering the army, he became a prominent intriguer and pronouncementist. Took part in all the revolts which have broken out in Spain. He was exiled in 1854, after the Saragossa rising. Returning after the July revolution, Serrano held command in New Castile. He was made a Captain-General the following year. In 1866 he was imprisoned. In concert with Marshal Prim he instigated the Revolution of 1868, which caused the expulsion of Queen Isabella, and made him Regent in June 1869. During the reign of King Amadeus, son of Victor Emmanuel, who had accepted the crown of Spain, Serrano quelled the Carlist insurrection. King Amadeus resigned the throne in 1873, and during the interregnum Serrano stayed in France. On the accession of Don Alfonso who was made King of Spain (1874), Marshal Serrano, returning to his country, was made a Senator. He bore the title of Duke de la Torre.

Serrière, M. See BOSPHERE EGYPTIEN.

Servia. Formerly an autonomous province of Turkey, now a kingdom under Milan I. of the House of Obrenovitch. The executive power is, by the constitution, vested in the king, and the legislative in the king jointly with the Skuptchina or National Assembly. There is also a Senate or Council of State always in session, which examines and elaborates projects of laws, etc. The Skuptchina

of 178 members is elected three-fourths by the nation and one-fourth by the king, and is renewed every three years. Besides this there is a Great Assembly of 538 members, none being royal nominees, called when required to decide vital and constitutional questions. All tax-paying citizens are electors. State religion is Greek Orthodox, but others are tolerated. Education very backward: about 2½ per cent. of the population at school—in England the proportion being about 12½. Area 18,800 square miles, with a population of about 1,870,000. Revenue and expenditure in 1885 about £1,840,000. National debt about £7,000,000. Army, in peace about 18,000, in war about 210,000. In 1872 the then regents surrendered the government to Prince Milan, the present king. In July 1876 war was declared against Turkey [for which see TURKEY], at the close of which Servia was declared independent, and received an accession of territory—though by no means proportionate to her wishes. A convention for extension of railway communications was made with Austria in 1880. In March 1882 Prince Milan was proclaimed king. In Sept. and Oct. 1883 attempts at insurrection on the part of the Radicals were successfully repressed. Upon the announcement of the union of the two Bulgarians (Sept. 1885), Servia mobilised her army, placed it on the frontiers of Bulgaria and Servia, and claimed compensation in Macedonia for the increase in the power of Bulgaria, from whom she also claimed the district of Widin; and she at the same time addressed a note to the Powers, complaining of the violation of her frontiers by robber bands from Bulgaria. Prince Alexander paying no attention to the claim, Servia concentrated her army at Pirot and the Widin frontier in October. On Nov. 14th, King Milan declared war, and on the same day crossed the Bulgarian frontier and occupied Trn. On the 16th he stormed the Dragoman Pass, after a stout resistance, and drove back the Bulgarians nearly to Sofia; a division also defeated the Bulgarians at Kula, and advanced upon Widin, which was bombarded on the 23rd. Very severe fighting took place between the two armies, in the course of which Prince Alexander and his troops displayed the greatest bravery; and eventually, after a conflict of five days' duration, the Servians were defeated with great loss, and the Dragoman Pass recovered. On the 23rd the Bulgarians advanced in their turn, drove the Servians over the frontier, and on the 26th severely defeated them, and occupied Pirot. An armistice was then granted, upon an intimation that if Prince Alexander advanced further into Servia he would have to deal with Austrian troops. Negotiations took place between the Powers, with the object of arranging a permanent peace, which will be, it is hoped, secured by the treaty signed between Turkey, Servia and Bulgaria (March 3rd, 1886). (See BULGARIA.) M. Garashanine, the Premier, having, in consequence of a divergence of views regarding the policy to be pursued in the present strained relation of the Balkan peninsula, resigned, M. Ristich was charged with the formation of a new cabinet, but his efforts proving unsuccessful, M. Garashanine has (April 5th) returned to office, and formed a new cabinet (see APPENDIX).

Seton-Karr, Mr. Henry, M.P., of 11, Queen's Gardens, Hyde Park, and Kippilaw, St. Boswell's, N.B., was b. in India, 1853. Educated

at Harrow and Oxford, taking a second-class in law. Returned in the Conservative interest as member for St. Helen's (1885).

Settled Estates Act. See LAND QUESTION, THE.

Settled Land Act, The, 1882. The object of this Act is to enlarge the powers enjoyed by limited owners of real property, especially by life-tenants. But the powers which it confers upon the limited owner are to be exercised by him as trustee for all persons interested under the settlement which creates his limited ownership. Under the Act a limited owner may sell the whole or any part of the settled land or any part thereof. He may exchange settled for other land, and he may concur in the partition of any undivided share in land comprised in the settlement. He may let the settled land or any part of it upon a building lease of ninety-nine years, a mining lease of sixty years, or an agricultural lease of twenty-one years. But he may not sell or lease the principal mansion upon any settled land or its grounds without the consent of the trustees of the settlement or an order of the court. Although not empowered by the settlement to do so, he may, with such consent or order, cut down and sell timber on the settled land. Three-fourths of the proceeds, however, must be treated as capital money under the Act. When a limited owner grants a mining lease under the Act, three-fourths of the rent, if the settlement did not empower him to open new mines, and one-fourth of the rent in all other cases, must be set aside as capital money under the Act. A limited owner may obtain an order of the court to sell heirlooms comprised in the settlement; but the proceeds will be capital money. Capital money arising in the ways above mentioned and in certain other ways, particularly from sale of the settled land, must be paid to the trustees of the settlement or into court. With their consent or by an order of the court it may be expended in various ways, of which the chief are as follows: (a) in purchase of government securities or railway debentures; (b) in the redemption of incumbrances upon the settled land; (c) in permanent improvements of the settled land, such as drainage or irrigation works, embankments, cottages, farmhouses, mills, roads, tramways, railways, canals, docks, piers, markets, etc.; (d) in the purchase of other land; (e) in the payment of expenses incurred in exercising the powers given by the Act; (f) in any other way in which special provisions in the settlement authorise capital money to be spent. When capital money is invested in securities, it follows the same course of devolution as would have been followed by the settled land which it represents. When capital money is to be spent in improvements, the limited owner must submit a scheme for approval by the trustees of the settlement or by the court. The scheme having been approved the trustees or the court are to pay for its execution on receiving a certificate of the Land Commissioners, or of a surveyor or engineer approved by them, that the work has been properly executed. Land purchased with capital money becomes subject to the trusts of the settlement. By the court is understood the Chancery Division of the High Court. The new title of Land Commissioners is given to the commissioners formerly known either as the Enclosure Commissioners, or as the Copyhold Commissioners,

or as the Tithe Commissioners. The trustees of the settlement are the persons who have under it the power of sale usually inserted in settlements of real property, or the persons expressly declared by the settlement to be trustees for the purposes of the Act, or in default of both persons appointed by the court on the application of the limited owner. Under this Act a good deal of settled land has been offered for sale. More would have been offered had good prices been obtainable. A vast quantity of heirlooms (books, pictures, etc.) has been sold under the Act. It does not repeal the Settled Estates Act 1877, which had the same object but provided less effectual means for its attainment. It was the custom to insert in settlements clauses giving to trustees powers like those given by the Act. But these powers were usually less extensive, and the trustees had little inducement to use them. The limited owner has the inducement of a larger immediate income to be gained.

Settlement, Marriage. As employed by lawyers the term settlement signifies an instrument whereby the owner of property real or personal creates in such property certain limited interests to take effect at some time other than his own death. A settlement differs thus from an ordinary conveyance, by which property is transferred in its entirety from one party to another; and from a will or codicil, whose provisions take effect upon the death of the testator. The intervention of trustees is necessary in settlements of personal, but not in settlements of real estate. A settlement made upon the occasion of a marriage is a marriage settlement. Marriage constitutes a valuable consideration, which gives binding force to a disposition of property made with a view to marriage.

Seventh. See SCALE (MUSIC).

Severn Tunnel. See ENGINEERING.

Sewage. Of the various practical hygienic problems, none have claimed so large a share of public attention as the question of the proper disposal of sewage. Scientists have proposed many plans for the rendering innocuous to the health of the community this necessary product of an aggregation of human beings; but so far no method stands out prominent from the rest, and can lay claim to be, without fear of contradiction, superior to all others. This arises in a great measure from the fact that no properly organised and responsible inquiry into the merits and demerits of the several proposed remedies has yet been undertaken, nor has any plan yet received an unqualified official approval. At the beginning of the present century, and for long afterwards, cesspools were universal in London, and though sewers existed it was penal to use them for sewage; at this time the river water at London Bridge was drinkable. The use of waterclosets increased the volume of water in the cesspools, and necessitated an overflow to the sewers; so that in a few years the state of the law underwent a complete reversal, and now, instead of the discharge of sewage into sewers being a punishable offence, it is penal not to drain into a sewer if one be accessible. Taking the average of the community, the dry solid excrement contained in sewage is 1 ounce per head per day, which is distributed through 300 lbs. of water, say 15 grains per gallon; and as for the urine, whilst the major portion of that of adult males

never finds its way direct into the sewers, of the $2\frac{1}{2}$ ounces solids distributed through 300 lbs. of water, $1\frac{1}{2}$ ounces only is organic, one-half of which, urea, is speedily converted into innocent carbonate of ammonia. When fresh and freely exposed to air, as in the sewers only partially filled, sewage has little odour, and can scarcely be considered as offensive; but once let it accumulate in large quantities and come to comparative rest, putrefaction sets in, and it becomes vilely odorous—a seething mass full of minute organisms which live and grow and multiply in an airless deoxygenated medium. To prevent this, sewage must be dealt with in one of three ways:—(1) The sewage may be at once thrown into a large volume of water, a river, or the sea, where it can be carried away by currents, diluted by diffusion, and oxygenated by the dissolved oxygen without appreciable nuisance. (2) It may be applied directly to land, if sufficient area be obtained to dispose of the sewage without offence. (3) It may be treated with chemical agents, such as either destroy the organic matter or those that destroy the agents of putrefaction, the lower organisms. The first of these methods may be dismissed from the scope of sanitation, as causing a nuisance and danger to health. As to the second plan, utilisation on land, while in principle this is no doubt the right one, the fertility of the land being dependent on the restoration to it of the mineral constituents of the food grown upon it, the method from a pecuniary point of view can rarely be profitable, and commonly entails a heavy annual loss to the public bodies who have adopted it. With regard to the third method, there is an erroneous notion prevalent that sewage can be effectually treated by means of chemical substances alone. Chemical treatment directed to the end of clarifying sewage, but not of rendering it non-putrescent, is a great advantage, for the suspended solids of sewage are the chief source of difficulty in treating sewage. As to the agents to be used for clarification, if the sewage is to be used for broad irrigation, simple straining suffices; when land filtration is the plan to be adopted something more is advisable; and when the effluent is to be turned into a stream without any other treatment than a chemical one efficient clarification is indispensable—such a clarification as leaves less than a grain of suspended solids in each gallon of effluent, and even with this degree of efficiency no effluent ought to be turned into a stream unless the volume of running water is enormous in proportion to the sewage it is to receive. The chemicals to be used for precipitating sewage may be varied. Our space will only permit us to enumerate the three principal ones—lime, lime and sulphate of alumina, and sulphate of iron. The method of treating sewage known as the **A. B. C. plan** derives its name from the fact that Alum, Blood, and Clay are the agents used.

Sewage Irrigation. See IRRIGATION.

Sexton, Mr. Thomas, M.P., was returned as a Nationalist for South Sligo (1885).

Sexual Selection. The second of the two great evolutionary hypotheses with which the name of Darwin is connected. These serve to show not only that evolution has taken place, and that plants and animals are the result of development and not of special creation, but

how evolution has taken place. The first is the theory, now generally received as a fact, of **natural selection** (*q.v.*). The second is that of **sexual selection**. The line of reasoning in respect to this is as follows. In most animal species there is an excess of males over females. Hence, unless the very rare case of polyandry occurs, the female has to choose from more than one male, and between the males there is a contest of strength or of beauty or of song. If among the males any variation occurs giving its possessor an advantage in the struggle with his fellows, that male is more likely to be selected, and therefore to have offspring. Hence, the variation is likely to be transmitted and intensified. Sexual selection has, according to Darwin, played in the formation of new species a part only second to that played by natural selection. In the colour of male insects and the colour and song of male birds, we see extreme cases of sexual selection. (See Darwin's "Descent of Man.")

Seymour, Governor Horatio, a distinguished American politician and citizen, was b. near Syracuse, New York, 1810. His ancestry was directly traceable to the family which here bears the Somerset title. Educated for and admitted to the bar, but, being a man of fortune, did not seriously take up his profession. Elected to the State Legislature; at the age of thirty-three became Speaker of that body. In 1850 he was narrowly defeated by the Whig Washington Hunt for the Governorship, and two years later was elected. He served as Governor of the State two years. In 1862, when the failure of the Federal Government to immediately suppress the rebellion created a considerable political reaction throughout the North, he was again elected Governor. He acquitted himself with rare skill and manliness during this critical period. In 1868, against his will, he was nominated by the Democrats; but, although he carried his own State, was beaten by General Grant. Governor Seymour never again consented to stand for office, but retired to his country seat near Utica, New York, where he devoted his attention to agricultural and social study and writing, and was always the principal figure at historical celebrations and general meetings in the public interest. With few exceptions he was the best of American orators, and was without any exception whatever the kindest, most attractive, most valued of American publicists, alike in his utterances and his personality. Governor Seymour d. at Deerfield, N. York, U.S.A., Feb. 1886.

S. G. See MINERALOGY.

"S. G. A." See NOMS DE PLUME.

Shaftesbury, Anthony Ashley-Cooper, 8th Earl of (creat. 1672), was b. 1831; succeeded his father 1885. Formerly in R.N.; served in Black Sea and Baltic during Crimean war; was M.P. for Hull (1857-59), and for Cricklade (1859-65). The 1st peer in this family was Lord Chancellor temp. Charles II., and as Baron Ashley he was a member of the well-known "Cabal" cabinet.

Shaftesbury, Rt. Hon. Sir Ashley Cooper, P.C., 7th Earl of, b. April 28th, 1810, was the eldest son of the sixth Earl. He was educated at Harrow and Christ Church, Oxford, where he took a first-class in Classics in 1822. As Lord Ashley he entered the House of Commons as member for Woodstock in 1826. In 1830 he represented Dorchester, and in the same

year married Lady Emily Cooper, by whom he had issue six sons and four daughters. The Countess of Shaftesbury died in the autumn of 1872. In 1831 he was returned for the county of Dorset, which constituency he represented until 1846. At the general election in 1847 he was elected as one of the members for the city of Bath, and continued to sit for that borough till the death of his father in 1851 elevated him to the earldom. At the outset of his parliamentary career he was in politics a Tory, and supported the government of Lord Liverpool. He was, however, also a follower of Canning, and afterwards gave in his adhesion to the Duke of Wellington's administration, under which he held the office of one of the three commissioners of the Board of Control. During the first brief ministry of Sir Robert Peel in 1835, Lord Ashley was Civil Lord of the Admiralty; but in 1841, when Sir Robert came in the second time, Lord Ashley refused to take office, on the ground of a difference of opinion between himself and the Prime Minister on a question to which he had devoted his whole parliamentary force and attention. From that time, both as Lord Ashley and Earl of Shaftesbury, he continued a Conservative unattached, his politics being based more on social than party grounds, being thus enabled to act as statesman and legislator with perfect independence. Earl Shaftesbury was credited with possessing influence with Lord Palmerston (to whom he was related by marriage) in the choice of Churchmen who were raised to the episcopate. His philanthropic work was great in its idea and execution. It was by his energy and perseverance that a Royal Commission was appointed to inquire into the employment of women and children in mines, at the pit's mouth, in factories and various other branches of industry conducted by their labour. The report of this commission aroused the indignation of the country, which had never dreamt of the awful evil that existed. Next to factory legislation, Lord Shaftesbury's name is most closely associated with the cause of ragged schools, the shoeblack brigade, the reformatory and refuge union, and his efforts to ameliorate the condition of the costermongers, flower girls, and juvenile beggars, etc. As a practical philanthropist he laboured with unabated energy and unwearied assiduity, being always at the head of every movement calculated to improve the religious, social, economic, and physical condition of all communities. He died Oct. 2nd, 1885, and was honoured by a public funeral at Westminster Abbey (Oct. 8th).

Shalmaneser II. See ASSYRIOLOGY and BIBLICAL ARCHÆOLOGY.

Shannon, Henry Bentinck Boyle, 5th Earl of (creat. 1756); Baron Carleton (1786), by which title he holds his seat in the House of Lords; was b. 1833; succeeded his father 1868.

Shaw, Mr. See HOME RULE and POLITICAL PARTIES (ENGLISH).

Shaw, Mr. Thomas, M.P., was b. 1823. Educated at Huddersfield Coll. J.P. for Halifax; Deputy Lieutenant for the West Riding; Mayor of Halifax (1866-68); President of the Chamber of Commerce (1874-76). Returned in the Liberal interest as member for Halifax (1882-85); re-elected 1885.

Shaw-Lefevre, Rt. Hon. George John, P.C., son of the late Sir John Shaw-Lefevre, K.C.B., Clerk of the Parliaments, nephew of Viscount Eversley, late Speaker of the

House of Commons. He was b. 1832. Educated at Eton and Trinity College, Cambridge, where he graduated M.A.; was called to the bar at the Inner Temple (1856), of which he was elected a Benchet (1882). Entered parliament as Liberal member for Reading (1863-85), and held the following offices:—Member of the Deep Sea Fisheries Commission (1863-4); Civil Lord of the Admiralty (1866); Secretary to the Board of Trade (1868-71); Secretary to the Home Department (1871); Secretary to the Admiralty (1871-4, 1880); Chief Commissioner of Works (1880-85). Mr. Shaw-Lefevre was defeated at the recent election (1885) by a small majority (126). He married (1874) Lady Constance Emily Reynolds-Moreton, daughter of the third Earl of Ducie.

Sheehan, Mr. Jeremiah D., M.P. Vice-Chairman of the Killarney Board of Guardians. Returned as a Nationalist for East Kerry (1885).

Sheehy, Mr. David, M.P., was b. 1844. Educated at the Jesuit Seminary, Limerick, and the Irish Coll., Paris. Engaged in business at Mallow. Returned as a Nationalist for South Galway (1885).

Sheffield, Henry North Holroyd, 3rd Earl of (creat. 1816); Baron Sheffield, of York (1802), by which title he holds his seat in the House of Lords; was b. 1832; succeeded his father 1876. Was M.P. for East Sussex (March 1857 to July 1865).

Shell, Mr. Edward, M.P., son of the late Sir Justin Sheil, K.C.B., was b. 1851. Educated at Ch. Ch., Oxford. Returned as a Nationalist for Athlone (1874-80); Co. Meath (1882-85); South Meath (1885).

Sheol. See REVISED BIBLE, THE.

Shepherd-Cross, Mr. Herbert, M.P., of Bolton, was b. at Mortfield 1847. Educated at Harrow and Exeter Coll., Oxford. J.P. for Lancashire and Herts, and capt. of the Duke of Lancaster's Regt. of Yeomanry. Returned in the Conservative interest as member for Bolton (1885).

Sherborne, Edward Lenox Dutton, 4th Baron (creat. 1784), was b. 1831; succeeded his father 1883.

Sherbrooke, Robert Lowe, P.C., G.C.B., 1st Visct. (creat. 1880), was b. 1811; son of the late Rev. Robert Lowe, rector of Bingham, Notts. Was for several years a private tutor at Oxford; called to the bar at Lincoln's Inn (1842), and in the same year emigrated to Australia, intending to practise at the bar in Sydney; was a member of the Council of that colony (1843-50), when he returned to England; was a Joint Secretary of Board of Control (1825-5), Vice-President of Board of Trade and Paymaster-General (1855-8); President of Board of Health, and Vice-President of the Educational Committee of the Privy Council (1859-64), Chancellor of the Exchequer (1868-73), and Secretary for the Home Department (1873-4); Was M.P. for Kidderminster (1852-9), for Calne (1859-68), and for the Univ. of London (1868-80), when he was raised to the peerage.

Shere Ali. See AFGHANISTAN.

Sheridan, Mr. Henry Brinsley, M.P., F.R.G.S., was b. 1820. Called to the bar at the Inner Temple (1856). Captain Cinque Ports Artillery Volunteers (1861). He is a J.P., and Knight of St. John of Jerusalem. Returned in the Liberal interest as member for Dudley (1857-85); re-elected 1885.

Shipping, and Ship-building of 1885. The ship-building industry of 1885 experienced an

almost unprecedented dulness. The same complaint comes from all quarters; and it has been computed that the total output of iron and steel vessels amounted in the aggregate to only 540,000 tons, against 750,000 tons in 1884, and 1,250,000 tons in 1883. In the **Clyde** the production was 193,758 tons in 1885, against 296,854 in 1884, and 419,664 in 1883. Of these tonnages 92,677 were built of steel in 1885, in 1884 some 133,670, and in 1883 there were 129,651 tons. In the **Wear**, the production was the smallest in gross tonnage known since 1876; in 1885 there were 61,768 tons constructed, against 98,521 in 1884, and as much as 212,313 in 1883; it is added that two large yards did not launch a single ship during the year, while two were closed in December. Similar reductions are reported from the **Tyne** and **Mersey**, but not the **Tees**. The force of these figures will be better understood when it is pointed out that whereas in 1883 over £19,000,000 was invested in new ships, the following figures have been quoted as the typical rates for new iron shipping in 1885 and other years:—£10 per ton in 1885; £11 10s. to £13 in 1880; £13 in 1877; £19 in 1873-4; £17 in 1872; and £14 in 1870; the average price over ten years may be reckoned at £2 10s per ton higher than in 1885. The **freight markets**, of course, reflect this unfavourable condition of affairs—or rather cause a reflection in the ship yards. The general contraction of trade has caused some extraordinary developments: thus, pig-iron rates from the **Clyde** have varied between *nul* and 10s. a ton to New York; and the regular coal traffic between the **Tyne** and **Genoa** has shown a variation between 9s. *gd.*, the average of 1884, and 8s. 7*ad.*, the lowest of 1885. On one day in December 1885, no less than fifteen steamers were lying in **Leith Docks**, owing to unremunerative freights, although they represented an aggregate of 12,627 tons, and an approximate cash value of £300,000. With regard to the future, it is felt that the falling off in construction must naturally bring about an early improvement in the building yards, especially as there has not been a corresponding increase in the out-turn of vessels abroad. As to the freights, too, the annual loss of vessels at sea must narrow the ground of competition. According to the Board of Trade returns for the twelve months ending January 31st, 1886, there were 964 British vessels lost, having a gross of 263,000 tons, and of these 206 were steamers of 27,000 tons. During the year 1885 little was heard of the **Royal Commission on Shipping**, except the publication of a voluminous report of evidence; the **Lead Line Committee**, however, issued a report which is thought to practically confirm the principle laid down by Lloyds Committee as to the free board question. In January 1886 the following return was issued by the Registrar-General of Shipping, showing the number and tonnage of vessels entered on and taken off the Register for the past six years. The figures for January 1880 and December 1885 are estimated.

<i>Steam and sailing ships entered.</i>			
1880 .	1,758 vessels,	534,999 net tons.	
1881 .	1,710 "	659,653 "	
1882 .	1,869 "	788,062 "	
1883 .	2,051 "	862,254 "	
1884 .	2,012 "	675,347 "	
1885 .	1,644 "	512,125 "	
Totals	11,053	4,032,440	"

Steam and sailing ships taken off Register

1880 .	1,976 vessels,	536,003 net tons.	
1881 .	2,107 "	554,953 "	
1882 .	1,915 "	553,145 "	
1883 .	1,814 "	542,190 "	
1884 .	1,688 "	464,153 "	
1885 .	2,234 "	452,844 "	

Totals 11,734 " 3,103,288 "

The increase in the iron steamers alone during the six years was 1,766 in number, and 1,592,341 in tonnage, which is calculated as representing an addition to the merchant fleet of a new 900 ton (net) steamer every working day over the whole period. The tendency to build larger vessels will be seen above. The additions in 1884 and 1885, it will be observed, were smaller in number—which is accounted for by the over-building in 1882 and 1883, and the trade depression; but a slight revival in demand would cause considerable accessions to the fleet, for steamers on the newest models are built cheaper now than formerly.

Shipwrights, The Worshipful Company of. See CITY GUILDS, THE.

" **Shirley.** See NOMS DE PLUME.

Shirley, Mr. Walter Shirley, M.P., was b. 1851. Educated at Rugby and Balliol Coll., Oxford, graduating with honours (1875). Called to the bar (1876). Returned in the Liberal interest as member for Doncaster Division, Yorkshire (1885).

Shishak, Expedition of. See BIBLICAL ARCHÆOLOGY.

Shrewsbury, Charles Henry John Talbot, 20th Earl of (creat. 1442); b. 1860; succeeded his father 1877. Is hereditary Lord High Steward of Ireland.

Shoddy. See WASTE MATERIALS, UTILISATION OF.

Shoddy Factories. See WOOLLEN AND WORSTED MANUFACTURES.

Shorthand. Abbreviation and employment of arbitrary marks to indicate letters and sounds. Shorthand was known to the Greeks and the Romans in a limited degree. From the decline of the Roman Empire till 1588, when Bright published the first system of shorthand in England, little progress was made. Bales' "Brachygraphy" followed next (1590). These two systems were merely collections of arbitrary marks for certain words. The theory of shorthand dates from the alphabet of Willis (1602), who describes his system as "*spelling characterie*," and those preceding as "*verbal characterie*." After Willis the principal systems have been:—Rich (1654), Mason (1672), Gurney (1740), Angel (1758), Byron (1767), Macaulay (1780), Mavor (1780), Taylor (1786), Clive (1810), Lewis (1812), Harding (1823), Moat (1833). In 1837 Phonography (spelling by sound) was invented by Isaac Pitman, of Bath, and marks a new era in the history of shorthand, since by it the *sounds* of the English language are fully represented each by one stroke or motion of the hand; and are so arranged as to show, as far as possible, their mutual relations. In the consonants, *p* stands first, next *b*; the rest follow in perfectly natural order, first the mute or explosive letters, proceeding from the lips to the throat; then the semi-vocals, or continuants, in the same order; and lastly the nasals, liquids, coalescents, and aspirate. Scarcely more than half the consonants are *essentially different*; the articulations in the

pairs *p* and *b*, *t* and *d*, *f* and *v*, etc., are the same, but the sound is, so to speak, light or "surd" in the first, and heavy or "sonant" in the second letter of each pair. The consonants in each pair are represented by strokes in the same position, and of the same shape, but that chosen for the second is written *thick*, instead of *thin*, thus, $\backslash p, \backslash b, | t, | d, \backslash f, \backslash v$, etc.; and thus, not only is the memory not burdened with a multitude of signs, but the mind perceives that a *thin stroke* corresponds with a *light articulation*, and a *thick stroke* with a *heavy articulation*. The vowels, twelve in number, are divided into *long* and *short*, each series commencing with the most open sound. The six long vowels, as heard in the words *palm*, *pate*, *peat*; *nought*, *note*, *food*, are represented, the first three by heavy dots, the other three by short heavy strokes, placed before or after the consonant. The six short vowels, heard in *pat*, *pet*, *pit*; *not*, *nul*, *foot*, are similarly represented, the dots and dashes in this case being light. For a more detailed explanation of the system see Mr. Pitman's works. Since 1837 many systems have been published, the most important being Bell (1849), Everett (1877), Pocknell (1881), Sloan-Duployé (1882). Phonography is the only system that has produced a literature. All its publications would constitute a small library. The following facts show its great and increasing popularity. The *Phonetic Journal*, a periodical published by Mr. Pitman (20, Paternoster Row, E.C.), partly in shorthand, has a weekly circulation of 18,500. In addition, there are seven monthly magazines, lithographed entirely in Phonography. The *Phonetic Society*, instituted in 1843, receives a yearly addition of over 2,000 members. Each important town now possesses its Shorthand Writers' Association, and there are forty-five such associations in existence, the largest having a membership of over 400. They have increased very rapidly of late.

Shute, Baron. See BARRINGTON.

Shuttleworth, Sir Ughtred James Kay, M.P., the eldest son of the late Sir James Kay-Shuttleworth, of Gawthorpe Hall, Padiham, near Burnley, was b. in London 1844. Member of the London School Board (1880-82). Served on a Royal Commission to inquire into the reformatories and industrial schools of the United Kingdom (1882). Returned in the Liberal interest as member for Hastings (1868-80); Clitheroe Division, North-East Lancashire (1885). Under-Secretary for India in the present Gladstone administration (Feb. 1886).

Siberia. A Russian province, larger than Europe, which is only separated from the rest of the empire by the lowly Ural hills, a slender barrier which is now being broken down by the extension of the Russian railway system into Siberia, and by the incorporation of the West Siberian governments with the European Russian administrative system. English people are now becoming disabused of the notion that Siberia is simply a place of exile, but they hardly realise that to the average Russian Siberia is simply what Canada is to the average Englishman. There is, of course, the exceptional feature of exile, or deportation, but other outlying districts of home Russia, such as Archangel, Vologda, Astrachan, and Orenburg, have for generations been places of exile, and are so still, so that this is a characteristic that does not press so heavily on the Russian as on

the English imagination. Every year Siberia is increasingly regarded as a colonial appanage, and thousands of peasants freely make their way thither every spring, while Russian merchants and capitalists and Europeans settled in Russia think no more of a journey to Siberia than Englishmen do of a trip to Canada. Still, to the actual exile, whether political, criminal, or deported by the rural commune for being a vagabond, Siberia is as bad as Botany Bay used to appear to English convicts. About 8,000 or 10,000 are deported thither every year, of which the larger proportion is simply placed into this or that district, and allowed to shift for themselves. Hardened convicts and important political offenders are kept under closer control, and it is a fact that they are frequently exposed to very severe sufferings. The Russian population of Siberia has been principally built up of exiles. Excluding natives, there are about 3,000,000 Russians, and if it be remembered that since Yermak conquered the country, three hundred years ago, 1,000,000 exiles have been deported to it, the number of inhabitants who have not sprung from exiles, or are not exiles themselves, cannot be very large. While Canada in little more than a century has acquired a population of nearly 5,000,000, and has spanned her territory by a railway, Siberia, depressed by the weight of exiles, has, in spite of her magnificent resources, attained only a population of 4,000,000 in three hundred years, and would be unable of herself to maintain any defence against an enemy. People who settle in Siberia admire the climate, and there are splendid stretches of fertile land awaiting colonisation, while the mining resources are the wonder of travellers, who invariably predict a great future for the country, which seems destined to become the favourite field of emigration for the surplus Russian population.

Sickness and Accident Association of Edinburgh. See INSURANCE, FIRE AND LIFE.

Sidebottom, Mr. Tom Harrop, M.P., of Etherow House, Mottram, Cheshire, was b. 1826. Educated at the Grammar School, Manchester. Is J.P. for Cheshire and Derbyshire, and proprietor of important manufactories. Returned in the Conservative interest as member for Stalybridge (1874-80); re-elected 1885.

Sidebottom, Mr. William, M.P., of Harwood Lodge, Broadbottom; was Mayor of Glossop (1873-74); is a captain in the 4th Cheshire Rifle Volunteers, and was returned as member for High Peak, Derbyshire, in the Conservative interest (1885).

Sidmouth, William Wells Addington, 3rd Visct. (creat. 1805); b. 1824; succeeded his father 1864. Was M.P. for Devizes (Feb. 1863 to March 1864). The 1st peer was a distinguished minister. He was the eldest son of Dr. Addington, of Reading.

Siemen and Halske, Messrs. See PNEUMATIC TUBES.

Siemens, Sir Charles, F.R.S., b. at Louthe, in Hanover, April 4th, 1823. After having a preliminary training at the Gymnasium at Lubeck, he passed on to the School of Arts at Magdeburg, and then to the University of Göttingen. He subsequently entered the factory of Count Stolberg, where he studied engineering and electricity. In 1843 he migrated to London, whither he was followed some time after by his three brothers, who joined him in various scientific undertakings.

In 1858 the great works of Siemens Brothers were established at Charlton, West Woolwich, where are principally manufactured submarine electric telegraph cables; and in 1868, at Landore, Swansea, the great steel works were set on foot, which are able to produce about 1,000 tons of pure cast steel per week. Dr. Siemens was also the author of several important discoveries in physics and electricity, and bestowed much study on the process of lighting large buildings and streets by electricity; he was also extremely successful in perfecting the appliances for the transmission of electric force. In 1882 his work on the "Conservation of Solar Energy" won the attention of all scientific men, and in 1883 he received the honour of knighthood. He died Nov. 20th, 1883.

Siemens Machines. See DYNAMO.

Sierra Leone. See WEST AFRICAN BRITISH POSSESSIONS and BRITISH COALING STATIONS. **Sikhs** are a community who inhabit the Punjab, in Northern India. Their name is derived from the Sanscrit *s'ishya*, disciple. Originated by **Namak** in the beginning of the sixteenth century, it was not until 1764 that the Sikhs formed themselves into a nation or commonwealth. After the death (1839) of their well-known leader, **Runjeet Singh**, dissensions began in the nation, and as a consequence they (1845) crossed the Sutlej river and overran British territory, occasioning a sanguinary war, which was concluded by the British victory of **Sobraon** (1846). The barbarous murder of two British officers occasioned (1848) a war as fiercely contested as the former, which was terminated by the defeat of the Sikhs by the British force commanded by **Lord Gough**. Immediately thereafter the East India Company annexed the Punjab, and the existence of the Sikhs as an independent nation thenceforth ceased.

Silchester, Baron. See LONGFORD.

Silk Waste. See SILK MANUFACTURES.

Silurian. See GEOLOGY.

Silver, English. See MINING.

Silk Manufacture, The. Garments of silk were worn by the English nobility and clergy long before the manufacture was established in the country. Silk was first woven in England in the year 1604, but the business did not make much progress till a body of French refugees settled in Spitalfields, London, and embarked their skill in it. In the year 1714 a considerable impetus was given to the trade by the erection of a silk mill at Derby by **Sir Thomas Lombe**, a London merchant. The trade gradually extended, **Manchester, Coventry** and **Macclesfield** acquiring celebrity in connection with it. Since 1860 the silk manufacture has been declining in England, mainly owing to foreign competition. In the palmy days of the trade 60,000 persons were engaged in it in London, and 40,600 in Coventry, but now there are not more than 4,000 in London and 10,000 in Coventry. Macclesfield has suffered in somewhat similar proportions. In 1860 we imported nearly 9,000,000 lb. of raw silk, whereas in 1885 we took only 2,081,800 lb. On the other hand, while our imports of silk manufactures in 1860 amounted to £3,344,000, they reached £10,267,450 in 1885. Our exports of silk goods, thrown in 1885, and yarn in 1860 were valued at £2,413,000, but in 1885 they reached only £1,957,211. These figures help us to understand in a general way the extent of the decline of the silk industry in England. What remains to us of the silk

manufacture we owe mainly to **Mr. S. C. Lister**, of Bradford, whose success in utilising "waste silk" has been so remarkable. One result of this gentleman's enterprise has been to draw the industry to Yorkshire from the midland and southern counties of England. In 1856 there were in **Yorkshire** 17 silk-spinning factories, with 117,164 throwing spindles, while in 1885 there were in the county 31 factories, with 189,830 throwing spindles, 73,649 doubling spindles, and 1,270 power-looms. There are at present in **England** 681 silk factories, and in **Scotland** 10, **Ireland** having no part in this industry. In 1856 England had 454 factories and Scotland 6. These figures would seem to contradict what has been said about the decline of the trade; but their significance will be understood when it is stated that the introduction of the power-loom has given rise to a large number of cottage factories, in each of which only four or five looms are worked. In the west midland district there are no fewer than 353 of these cottage factories. The following are the official returns relating to the silk industry since the year 1856:—

	1856.	1868.	1874.	1885.	
	460	591	818	691	Number of factories . . .
	1,093,799	978,168	1,114,703	888,104	Number of throwing spindles . . .
	—	181,538	221,708	174,644	Number of doubling spindles . . .
	9,260	14,625	10,002	11,966	Number of power-looms . . .
	8,087	4,885	6,871	3,195	Children employed . . .
	16,899	12,177	13,171	13,110	Persons employed—Males . . .
	39,238	28,840	32,388	29,885	" " Females . . .
	56,137	41,017	45,559	43,995	" " Total . . .

Simmons, Mr. See BALLOONING.

Simon, Sergt. John, M.P., was b. 1818. Educated at Univ. Coll., London. Called to the bar at the Middle Temple (1842). Created Serjeant-at-Law (1864). Returned in the Liberal interest as member for Dewsbury (1868-85); re-elected 1885.

Simon's Bay. See BRITISH COALING STATIONS.

Simplon Railway Tunnel. See ENGINEERING.

Sinclair, Charles William St. Clair, 14th Baron (creat. 1489), was b. 1831, and succeeded to the title 1880.

Singan. See CHINA.

Singapore. See BRITISH COALING STATIONS.

Sirius. See ASTRONOMY.

Sitwell, Sir George Reresby, M.P., of Renishaw Hall, Chesterfield, Derbyshire, was b. 1860. Educated at Eton and Christ Church, Oxford. He is a lieutenant in the West York Yeomanry Cavalry. Returned in the Conservative interest as member for Scarborough (1885).

Six-Inch Scale. See GEOLOGICAL SURVEY.

Sixpenny Telegrams were introduced on October 1st, 1885. Hitherto, since the date of the transfer of the telegraphs to the State, the rate had been 1s. for every 20 words; but agitation had long been rife for a reduction of the tariff, and doubtless the popular wishes would have been met at an earlier period, had the financial interests of the Telegraph Department permitted of it. It appears, however, that the State is saddled with a debt of over £10,000,000 in respect of the telegraphs, and hitherto the revenue earned from that source has scarcely in any one year been sufficient to cover the interest due on the contracted debt. In such circumstances the time seemed scarcely ripe for the reduction of the existing rates. In the early part of 1883, however, a resolution was passed by the House of Commons in favour of the minimum charge for inland telegrams being reduced from 1s. to 6d.; and upon that resolution £500,000 was set aside for the initial outlay involved by the vast preparations rendered necessary by the reduced tariff. Considerable interest was evinced by the late Mr. Fawcett in this measure of telegraph reform, and he did all in his power to hasten on the work, the accomplishment of which it is to be regretted he was not spared to see. There was considerable diversity of opinion as to the precise form which the reduced tariff should take, and the proposal to charge for the addresses met with much disfavour. It was conclusively shown, however, that free addresses could not be allowed consistently with the financial interests of the Department; and Parliament at length decided to adopt the tariff which is now in operation—namely, 6d. for the first 12 words and ½d. for each additional word, including addresses. The charges cover the cost of delivery within the town postal delivery of the terminal office, if a head post office; otherwise the telegram is delivered free within the limit of one mile only. Beyond the free delivery, portage is charged at the rate of 6d. per mile, or part of a mile, for any distance under three miles from the terminal office; beyond the three miles portage is charged, for delivery by mounted messenger, at the rate of 1s. a mile for the whole distance from the office door. Concerning what the Post Office accepts as words for telegraph purposes, it should be stated that no combination of words is counted as one, with the exception of those which are ordinarily written as one, or coupled by hyphens, such as "sub-lieutenant," "almshouses," "twopence," etc. Names of towns and villages are counted as one word—thus, "Malvern Wells"; but all other names are counted according to the number of words they contain—thus, "Park Lane" counts as two words. As exceptions, "O'Neil," "Macdonald," "De la Rue," are counted as one word each; so also are names with the prefix "St." The abbreviations "can't," "won't," "I'll," "you'll," "couldn't," etc., are counted as one word; but the use of such

expressions increases the risk of error. Figures count at the rate of five to a word. In fractions one figure is added for the mark of division between the numerator and denominator. In groups of figures intended to express time, any stop is counted as a figure. In ordinal numbers, such as "1st," "3rd," the affix is counted as a separate word, as also a letter following a figure or group of figures. Initial letters, as a rule, are counted as one word each, but those denoting the several London Postal Districts are counted as one for each group. Two extra words are charged when words are desired to be underlined, or placed in parentheses, or within inverted commas. The sixpenny telegraph tariff having been in force only a few months, it is too early as yet to record statistics as to the results of the new rates. It may, however, be stated that the increase in the number of telegrams handed in since October 1st last has been very marked, and in the Metropolitan circuits alone the increase has been at the rate of 60 per cent. On the whole, success bids fair to attend the introduction of Sixpenny Telegrams.

Sixth. See SCALE (MUSIC.)

Skeleton Army. Organised by the rough element of the population as a counter agitation to the Salvation Army. Their method is to parade the streets, armed with rude instruments and missiles, and to endeavour, if possible, to come into collision with the Salvation Army. In several cases serious frays have occurred, many people have been hurt, and much damage has been done to property, notably at Worthing, where the Skeleton Army has been most prominent.

"Sketchley, Arthur." See NOMS DE PLUME.

Skjernice. See GERMANY.

Skinner's, The Worshipful Company of See CITY GUILDS, THE.

Slander. Slander is defamation by word of mouth, as distinguished from libel, which is defamation by writing, etc. As a rule abusive language, however coarse, is no ground of action, unless special damage can be shown to have ensued to its object. Thus calling a man swindler or a woman a prostitute does not in itself give ground for an action. But words imputing to any person misconduct in his business or profession, words charging any person with having committed an indictable offence, and words to the effect that any person is suffering from contagious disease, are all actionable without proof of special damage. In other respects the law of slander closely resembles the law of libel. Thus in both the definitions of malice, of publication, and of privileged communications are the same. The same liability attaches to those who repeat what they have heard or read. The truth of the charge made is a good defence in slander as well as in libel. The civil remedies for slander are the same as for libel. But slander, unlike libel, can never be made the subject of a criminal prosecution. (See LIBEL, and for the details of the law of slander consult "Addison on Torts," chapter 6.)

Slavonia. See AUSTRO-HUNGARY.

Slavonians, Legislation. See AUSTRIAN POLITICAL PARTIES.

Sliding Scale System. See MINING.

Silgo, George John Browne, 3rd Marquis of (creat. 1800); Baron Monteaigle (1806), by which title he holds his seat in the House of Lords; b. 1820; succeeded his father 1845.

"Slingsby, Lawrence." See NOMS DE PLUME.

Small, Mr. John Francis, M.P., was b. 1853. He became a solicitor in Ireland (1875). Coroner for the Southern Division of Armagh County, and a Poor Law guardian. Returned as a Nationalist for Wexford (1883-85); re-elected 1885.

"Smiff, Philander." See NOMS DE PLUME.

Smith, Mr. Abel, M.P., of Woodhall Park, Hertford, was b. 1829. Educated at Harrow, and graduated B.A. at Trin. Coll., Cambridge. Returned in the Conservative interest as member for Herts (1852-57, 1859-64, 1866-85); East Hertfordshire (1885).

Smith, Mr. Bickford. See BICKFORD-SMITH.

Smith, Mr. David, M.P., was b. in London. Educated in Scotland. He is J.P. and alderman of Brighton; Mayor (1880-81). Returned in the Conservative interest as member for Brighton (1885).

Smith, Mr. George, of Coalville, b. 1831, at Tunstall, Staffordshire. At the age of seven he was sent to work in the brick and tile yards of Staffordshire, abutting on canals and near to gipsies. Brickfield slavery, ignorance, and immorality led him early to take steps to improve the condition of brickyard children, which he endeavoured to secure by reading a paper at the Social Science Congress in 1870, and the publication of his "Cry of the Children from the Brick yards of England," in 1871, which aided the legislature to pass the Brickyards Bill in 1871, prohibiting the employment of boys under 13 and girls under 16, with the result (January 1, 1872) of sending 20,000 brickyard children to school. He also devoted his attention (1872) to the condition of the canal population, numbering 100,000 adults and children, 12 per cent. only of whom could read and write. In 1875 he published "Our Canal Population," and in 1877 the Canal Boats Act was passed. In 1881 he wrote "Canal Adventures by Moonlight"; in 1884 his Canal Boats Act of 1884 was passed, to amend the Act of 1877, which Acts, when properly carried out, will send 3,000 canal children to school. In 1878 Mr. Smith of Coalville began, on his old lines, to improve the condition of the 30,000 gipsy and vandwellers' children and their homes. In 1880 he published his "Gipsy Life," and in 1883 his "I've Been a-Gipsying." He had a bill before parliament for the gipsies and vandwellers in 1884-5, a part of which the Government included in their Housing of the Working Classes Act of 1885.

Smith, Mr. George. See BIBLICAL ARCHÆOLOGY.

Smith, Mr. Goldwin. See COBDEN CLUB.

Smith, Joseph. See MORMONISM.

Smith, Mr. Samuel, M.P., was returned in the Liberal interest as member for Flintshire (1886) in succession to the Rt. Hon. Lord R. Grosvenor, elevated to the peerage.

Smith, William. See GEOLOGY.

Smith, Mr. William, LL.D., Hon.D.C.L. Oxford, classical scholar, and editor of the *Quarterly Review* (q.v.) from 1867 to the present time (1886), b. in London, May 20th, 1813. Educated at the University of London, was intended for the bar, and kept the usual terms at Gray's Inn; but abandoned the profession of the law for classical literature. He is the editor of the *Classical and Biblical Dictionaries*, the author of many educational works, and was for several

years Classical Examiner in the University of London.

Smith, The Rt. Hon. William Henry, M.P., P.C., D.C.L. (Oxon), was b. 1825. He is Deputy Lieutenant for Middlesex, and J.P. for the counties of Herts, Oxford, Bucks, and Middlesex. Member of the London School Board (1870-74); of the Council of King's Coll., London; created D.C.L. of Oxford (1879). He has held the following official appointments: Financial Secretary to the Treasury (1874-77); First Lord of the Admiralty (1877-80); Secretary for War (1885). Returned in the Conservative interest as member for Westminster (1868-85); re-elected 1885.

Smith's Screw. See NAVY, BRITISH.

Smithwick, Mr. John Francis, M.P., was b. 1844. Educated at Kilkenny Coll. He is J.P. and late High Sheriff for Kilkenny; Mayor (1884). Returned as a Nationalist for Kilkenny City (1880-85); re-elected 1885.

Smuggling, 1885. See REVENUE, THE.

Smyth, P. J., late M.P. for county Tipperary, d. Jan. 5th, 1885. Mr. Smyth was an ardent repealer and Nationalist, and spent his inheritance with a lavish hand in furtherance of the Irish Nationalist cause. After the outbreak in 1848, when Smyth, O'Brien and Mitchell and others were expatriated, he went out at his own expense and rescued Mitchell by mingled art and daring. He was elected for the county Westmeath (1871). In 1880 he was returned for Tipperary as a Home Ruler; but he was opposed to the Land League.

Socage Tenures. See LAND QUESTION, THE.

Social Democratic Movement, The German. See GERMANY.

Social Democrats, German. See GERMAN POLITICAL PARTIES.

Socialism. The wide extension of the principle that the right of private property is conditional, and not absolute. In Germany the Social Democratic party has a great and rapidly growing political influence. In France and other Continental nations, Socialist doctrines have long been widely taught, but in England, till recently, they were scarcely known. Earlier movements, led by Robert Owen, and by the Christian Socialists, Maurice and Kingsley, had almost ceased, when about the year 1880 the association now called the **Social Democratic Federation** was founded. Other societies have been formed since, and the movement has lately attracted a great deal of attention. English politicians do not yet like the name Socialist, but prominent party leaders, such as Mr. Chamberlain and Lord Randolph Churchill, are known to be favourably disposed towards some part at least of the Socialist programme, which includes the abolition of the standing army, free education of all kinds, gratuitous administration of justice, Home-rule for Ireland, and the land with all mines, railways, and other means of transit to be declared and treated as collective or common property; the production of wealth to be regulated by society in the common interest of all its members; the means of production, distribution, and exchange to be declared and treated as collective or common property. As a means to attain this end, adult suffrage, the abolition of the House of Lords, and other extreme Radical measures are advocated, and proposals are made for cumulative taxation on incomes above £300, land nationalisation, State appropriation of railways, "with

or without compensation," and compulsory construction of artisans' dwellings. There are several forms of Socialism. That best known in England is **Collectivism**, which proposes to vest all capital, including land, in the hands of a thoroughly Democratic government for the common benefit. Another form is **State Socialism**, which advocates a sort of patriarchal government; under this system the State, as at present constituted, will concern itself largely with the health and happiness of the masses, by means of poor-laws, free recreation, factory regulation, etc. This form of Socialism already exists in England to a considerable extent. A third and distinct form of Socialism is **Anarchism**. The Social Democratic Federation is exclusively Collectivist. The Socialist League was the same at the outset, but is said recently to be inclining towards Anarchism. The Fabian Society is avowedly neutral. The views of the Socialistic reformers are supported by the following organisations:—**Social Democratic Federation**, a council elected by delegates from the branch societies. Hon. sec., H. H. Champion, 11, Palace Chambers, Westminster, S.W. Weekly organ, *Justice*. The **Socialistic League**, formed by seceders from the older body (1884), under the auspices of Mr. W. Morris, the poet, who edits their monthly organ, *The Commonweal*. Secretary, H. H. Sparling. Offices, 13, Farringdon Road, E.C. The **Fabian Society** aims at propaganda among the educated and intellectual classes chiefly. Hon. sec., F. Keddell, 17, Osnaburgh St., N.W. The **Guild of St. Matthew** (*q.v.*) is partly Socialistic, partly clerical. Monthly organ *The Church Reformer*. Hon. sec., F. Verinder, 8, Duke Street, Adelphi. **English Land Restoration League**, with the special object denoted by its name. Sec., F. Verinder, as above. "*The Christian Socialist*" (monthly), embodies the views of Maurice and Kingsley. On April 6th four Socialist leaders—Hyndman, Burns, Williams, and Champion,—were put on their trial for inciting to riot in the West End of London on February 8th.

Society, Aeronautical. See **BALLOONING**.

Society for the Employment of Women. See **WOMEN'S RIGHTS**.

Society for Promoting Christian Knowledge. *The*, was founded in 1698, "to promote and encourage the erection of charity schools in all parts of England and Wales." By the year 1741 nearly 2,000 charity schools had been established, chiefly through the instrumentality of the S.P.C.K. In 1811 the National Society (*q.v.*) was established, mainly to relieve the parent Society of some of its heavy labours. Of late years the Society has devoted much attention to the publication of cheap, good books, principally of a religious or educational nature. The expenditure by way of free grants of money and books was (1885) £48,954. It recently spent £32,000 on the building and establishment of a training college for one hundred schoolmistresses, at Tottenham; the cost of maintenance of this was £2,700 last year. (Sec., Rev. W. H. Grove, M.A.)

Sodo. See **PORT HAMILTON**.

Sokoto. See **SOUDAN**.

Solar Heat. See **ASTRONOMY**.

Solarium. A place for basking in the sun. Direct light is equally essential as air to health, and though it is true that cell-growth may take place in its absence, it is less permanent, and can only be perfected by the influence of the

direct actinic rays of the sun: how necessary, then, must sunlight be, acting both on body and mind, to the healthy growth of the child, and to the processes of repair during convalescence from disease! In dark valleys, where the hours of sunlight are few, we find rickets, goitre, and arrested development; and the blind courts and alleys of large towns are productive of mud, misery, and disease. The Romans, whose houses had but few windows (in Pompeii only a small number were found with any on the ground-floor, and those but of small dimensions—two to three feet), constructed terraces, termed *solaria*, on the housetops, for basking in the sun. Artificial gardens were formed there also in the time of Seneca (Ep. 123, Contr. Exc. v. 5). In a sanatorium now being constructed in the Isle of Wight, provision is being made for these "sun-baths."

Solar Parallax. See **ASTRONOMY**.

Solicitor-General. *The*, is one of the chief counsel to the Crown (see **QUEEN'S COUNSEL**) and assistant to the Attorney-General. He is in nearly all cases a member of parliament, and has political as well as legal duties. The present Solicitor-General is Sir Horace Davey, P.C. (1886).

"Solomons, Ikey, Junr." See **NOMS DE PLUME**.

Solymosi, Esther. See **JEWS**.

Somali-land. The country occupying the eastern horn or promontory of Africa. Little known till recently, when explored by Mr. F. L. James (consult the "Proceedings of Royal Geographical Society" for October 1885). **Zeilah** and **Berbera** are the chief ports on the Gulf of Aden, and are now occupied by British troops, a protectorate of the North Coast having been declared in 1885. The Somali are a Hamite race, nearly akin to the ancient Egyptians, and are closely related to the Gallas, who dwell south of Abyssinia—with whom, however, they are in perpetual feud. The Somali are a pastoral people, carrying arms and ever ready to use them. They are divided into tribes, under sultans, and are not altogether barbarous. The interior of the country appears to be an elevated plateau, with vast tracts of stony, waterless desert, but also with some fertile regions. About the centre of the promontory lies the country of **Ogadayn**. South of it is the rich valley of the **Webbe Shebeyli** ("Leopard river"). **Burton**, in 1856, visited **Harar**, which lies about 175 miles south from Zeilah; a walled town of 35,000 inhabitants, surrounded by fields and orchards. It was the capital of **Hadiyeh**, one of the seven provinces of the Arab empire of **Zeilah**, founded in the seventh century. In 1875 it was occupied by Egyptian troops. It sends slaves, ivory, tobacco, gums, tallow and other produce to Berbera. The Somali breed immense numbers of camels, for the sake of their flesh. The price of a camel in the markets is from eighteen to twenty-five dollars. **Off Cape Guardafui** lies **Socotra**, an island of 1,310 square miles, capital **Tamaria**. Mostly rocky and barren, but fertile valleys and plains, ruled by an Arab governor. Belongs to Sultan of Oman, but by treaty 1876 taken under British protection. The southern Somali coast has recently been taken under German protection and (February 1886) the German Government declared a Protectorate over the whole promontory; taking the coast beyond the British territory (Berbera) on the north, and as far south as Warsheikh, where the Zanzibar claims.

begin. Treaties have been effected with the various native rulers of the Somali coasts and country.

Somerhill, Baron. See CLANRICARDE.

Somers, Philip Reginald Cocks, 5th Baron (creat. 1784); b. 1815; succeeded his cousin 1883.

Somerset, Archibald Henry Algernon St. Maur, 13th Duke of (creat. 1546-7); b. 1810; succeeded his brother 1885. The 1st Duke was the celebrated Lord Protector Somerset emp. Edward VI.

Somerset, Edward Adolphus St. Maur, Duke of, d. Nov. 29th, 1885. He was b. in 1804. Entered the House of Commons as Lord Seymour in 1834, as M.P. for Totnes, which borough he continued to represent for twenty-one years. He filled the offices of Secretary to the Board of Control, Chief Commissioner of Woods and Forests, and First Lord of the Admiralty in Lord Palmerston's Administration. He was chairman of the committee appointed to inquire into the Commissariat failure in the Crimea. The late Duke was a liberal, but frequently dissented from Mr. Gladstone's views.

Somerton, Baron. See NORMANTON.

Somerville, Mr. Alex. See BOOK TRADE.

Sondes, George Watson Miles, 1st Earl (creat. 1880); Baron Sondes (1760); b. 1824; succeeded his father in the barony 1874. Was M.P. for the Eastern division of Kent (Dec. 1868 till Dec. 1874).

Sonnemann, Herr. See GERMAN POLITICAL PARTIES.

Sonnenwalde, Count Sohns. See CAROLINE ISLANDS.

Soudan. That section of Africa lying immediately south of the Sahara. Its limits are variously defined. It may be said to be bounded by Sahara on the N., to be merged into Senegambia and the countries of the Guinea Coast on the W., and to extend to the Abyssinian highlands on the E. The southern limit is N. of the Congo region. This vast territory is divided into numerous states. It is the home of the *true Negro race*, as apart from the other races of Africa; but Arabs have here imposed their religion and civilisation upon the natives, and have given rulers to many of the negro states. Tropical rains render parts of the Soudan very fertile; grain of various kinds, cotton, and many products are largely cultivated. The natives manufacture cotton cloths, and work in iron and in gold. Their towns are large and straggling. Houses are mostly of clay, square, with central court. The district of **Sennar**, the eastern limit, has been under Egyptian rule, and has been brought into notice through our campaign against the Mahdi *q.v.*, and Egypt. Westward of the Nile lies **Kordofan**, also Egyptian since 1821. Its capital is El Obeid (pop. 20,000 to 30,000), built of mud bricks. Mostly pastoral, grass plains, suffering from drought. **Darfur**, a mountainous and more productive state, extends to the west of Kordofan. Inhabitants, Arabs, Negroes, and half-breeds, supposed to number 5,000,000. Area twice the size of England. Till 1874 ruled for 35 years by an absolute sovereign, Sultan **Brahim**. An Egyptian adventurer, Ziber, or **Zobeir Pasha**, then obtained local influence and aid from Egyptian government, and raided into Darfur, defeating and slaying the Sultan. Ziber installed himself as ruler at Torra in 1876, and Darfur was garrisoned by 10,000

Egyptian troops. Since the Mahdi's rebellion its political connection with Egypt has ceased. (See works by Sir Samuel Baker, and accounts of Gordon's earlier operations in the Soudan). **Wadai** is a still larger state lying west of Darfur. It is ruled by the negro **Sheikh Ali**, and his government is severe but good. The land is poor, the people rude, quarrelsome, drunken; and there is an absence of arts and industries. Camels, cattle, sheep and goats are numerous. The capital is Abeshr. A subject province in the south, called **Dar Bunga**, abounds in big game and valuable productions. Exports through Darfur are slaves, ivory, gums, ostrich feathers. **Lake Tchad** lies 800 feet above the level of the sea; it is 250 miles long by 150 broad, but it is very shallow throughout, and studded with populous islands. It abounds in fish, crocodiles, and hippopotami. Fed by rivers Shari and Yeou. Shores low, jungly, infested by pirates and wild beasts. The region round has been most recently visited by **Rohlf** and **Nachtigal** (whose works consult). Two great Negro states, **Bornu** and **Baghirmi**, are predominant, and appear to have rendered all lesser neighbours subject. Baghirmi lies south-east of the lake, interposing between it and Wadai. Its people are martial and industrious, but were conquered in 1871 by Sheikh Ali of Wadai. Bornu is fruitful and lovely, much larger than England, and really a very important empire. The two states present a remarkable picture of Negro civilisation. They have a fully organised administration, courts, government with dignities and offices, and a regular military system. The Negro population are industrious, cultivate the land, are skilled in many arts, weave cloths, forge metals, and have manufactures. There are sundry large towns, of which Kuka (pop. 60,000) is the capital of Bornu. Houses flimsy, but ornamental. Chief buildings of brick and wood. People are barbaric, but not barbarous. Government based on a feudal system. Slavery a recognised policy. The **Mai**—Emperor or Sultan—of Bornu is absolute, with a "**Digma**" or vizier. He has an army of 30,000 men, horse and foot, many armed with firearms. His body-guard are clothed in armour, and rude cannons are cast at Kuka. The country is extremely rich in tropical African products of all kinds, and Nachtigal thinks its trade would be considerable. The natural opening to the country would be by the Benue, a tributary of the Niger. The Benue flows down through the great confederation or empire of **Sokoto**, and divides it from the Hausa country to the south. In Sokoto the pure Negro begins to blend with the Fellatah or Fulah race, of which the Hausas are examples. These countries are densely populated. Kano, capital of Sokoto, has pop. 30,000, carries on great traffic, and manufactures blue cotton cloth very largely. In all these countries Mohammedanism prevails, there is a dislike to whites, slaves are the current coin, and cowries the petty cash. The Niger is ascended by trading vessels some distance above its confluence with the Benue, but not without risk of hostile encounters. Yet there is considerable trade. Higher up the Niger lies **Gando**, a northern subdivision of the once great Hausa empire. It touches the Sonrhay Negro country on the north, and between it and the coast territory lie states of which nothing is known. The head waters of the Joliba or Upper Niger are within the

Mandingo kingdom of **Bambara**, first visited by Mungo Park. Between that and Gando is another Fulah state, **Masina**. Here the races are much intermixed, Fulah, and Fulah-Berber half-breeds, a fine race, prevailing. Hamda is the capital, but **Timbuktu** (pop. 13,000) is more famous. It is an immense mart for all the Western Soudan, as also is Sansandig in Bambara. It is said there are hundreds of chiefs and merchants here wealthy in European goods, and many who could produce £50,000 or £60,000 if required. Slavery is the blight of all these countries, and, European sentiment notwithstanding, will scarcely be suppressed in centuries. (For further information consult Keith Johnston's "Africa," and works of various travellers.)

South African Woollen Industry. See WOOLLEN AND WORSTED MANUFACTURES.

South America. Under this head are comprised the Argentine Republic, the Empire of Brazil, and the Republics of Bolivia, Chili, Ecuador, Paraguay, Peru, Uruguay, and Venezuela, each of which will be separately treated.

South American Meat Supply. See MEAT SUPPLY.

Southampton, Charles Henry Fitz-Roy, 4th Baron (creat. 1780); b. 1867; succeeded his father 1872.

South Australia. A colony comprising the central section of Australia. The older portion, South Australia proper, lies between 129° and 141° E. long., and from the sea to 26° S. lat. To this was added in 1863 the Northern Territory, lying between 129° and 138° E. long., and north of 26° S. lat. The whole colony, thus constituted, contains 903,690 sq. miles, extending 1,850 miles N. to S. and 650 miles W. to E.; pop. 313,322. Colony founded in 1836, under auspices of South Australian Colonisation Association; government vested in Governor appointed and commissioners approved by the Crown. Lands to be sold at not less than £1 per acre, and funds devoted to emigration from England. Early difficulties: large debt to Imperial Government incurred. Recovery began 1844, when 30,000 acres under cultivation, much stock, exports value £32,000. Rich copper mines discovered, proving great source of wealth. Representative government introduced, and, in 1852, local government of districts. In 1856 the constitution was given and proclaimed. Responsible government from that date. Northern Territory annexed in 1864. Overland telegraph from Port Darwin opened in 1872. South Australia takes part in the Federation movement. Executive, the Governor and responsible Ministry. Parliament consists of Legislative Council and House of Assembly. Council consists of twenty-four members—eight retire triennially. Elected by colonists of three years' residence, owning £50 freehold or £20 annual leasehold, or paying £25 annual rent; whole colony voting in four constituencies. Assembly elected triennially on manhood suffrage: forty-six members. Chief rivers are portions of lower Murray, Wakefield, Gawler, Torrens, in south, and the large and navigable Roper, Adelaide, Victoria, Daly, etc., in the Northern Territory. Country around St. Vincent Gulf very rich and fertile. Extensive pastoral regions farther back. Three considerable mountain chains traverse this part. Interior not entirely sterile. Very many salt lakes. Much fair pasture-land. Northern Territory rich soil near rivers, covered

with timber, bamboo, etc. Rugged but low table-lands behind. Suitable for tropical agriculture. Minerals are copper, iron, silver-lead in quantity; gold, tin, and bismuth, not so prevalent. Gold-fields both in south and north. Marble quarried, and petroleum raised. South essentially pastoral and agricultural; 2,754,560 acres cultivated, of which 1,846,159 are under wheat, yielding 14,650,000 bushels; 46,000,000 lb. wool exported, and 242,261 tons of breadstuffs (1882); minerals value £421,184. In 1884 wine produced 473,535 gallons; horses numbered 168,360; cattle 389,620; sheep 6,677,067. Settled part of colony divided into thirty-six counties, hundreds (agricultural blocks), twenty-one municipalities, and one hundred and twelve district councils—the last of most importance. Also four pastoral districts. Northern Territory ruled by a Resident and staff. Capital Adelaide, pop. 38,479, or, with surrounding suburbs, 60,000. It is a beautiful and well-built city, many fine buildings and institutions. Towns, not suburban, are mostly small centres: Gawler, Kapunda, Kooringa, Moonta, Naracoorte, Port Victor, Wallaroo, the largest; Palmerston and three others in Northern Territory. Nearly 1,500 miles of railway; 3,650 miles of good main road; over 5,000 miles telegraph. Revenue, £2,330,000; expenditure, £2,370,242; debt, £15,511,000. Imports, £5,584,276; exports, £5,137,680. (Consult Boothby's "Statistical Sketch of South Australia," Marcus' "South Australia," Gordon and Gotch's "Australian Handbook for 1886," etc.) The undeveloped resources of the colony are considerable. In the Northern Territory land suitable for sugar, tea, cinchona, etc., can be had in blocks of two square miles, at 6d. per acre rent or 7s 6d. purchase; pastoral leases for twenty-five to three hundred square miles at 6d. rising to 2s. 6d. per mile, for twenty-five years, and stock conditions. Volunteers and reserve number about two thousand of all arms. An ironclad and torpedo-boats are being built.

Southesk, James Carnegie, K.T., 6th Earl of (creat. 1633); Baron Balinhard (1869), by which title he holds his seat in the House of Lords; b. 1827. Served sometime in the army.

Southey. See LAKE SCHOOL, OR LAKISTS.
South Metropolitan Gas Co., A Stock. See ILLUMINANTS.

South Queensferry. See ENGINEERING.
"South, Simeon." See NOMS DE PLUME.

South Wales Coal Fields. See MINING.

Southwell, New Bishopric of (founded 1884), includes the counties of Nottingham and Derby. First bishop, Rt. Rev. George Ridding, D.D. (consecrated 1884).

South Yorkshire Coal Fields. See MINING.
Space, Higher Dimensions of. See FOURTH DIMENSIONS.

Spain. A monarchy lately under Alfonso XII. of the House of Bourbon, now under a regency. By constitution of 1876, Spain is declared a constitutional monarchy, with executive power vested in king, and the legislative power in the Cortes with the king. Cortes composed of senate and congress equal in authority. Senate in three classes—1st, senators in their own right; and, 100 Crown nominees (the two first classes not to exceed 180); 3rd, 180 elected by communes, church universities, and largest taxpayers, half to retire every five years. Congress composed of 431 deputies, elected by citizens of twenty-five

ears of age paying taxes. Islands of Cuba and Porto Rico represented in Cortes. Each province has its own parliament for municipal and provincial administration. Religion, Roman Catholic. Public worship of any other creed forbidden. Area, 197,767 sq. miles. Pop. 16,634,345. Revenue, June 1885, about £32,000,000. Expenditure about £31,000,000. National debt in 181 about £572,000,000. In 1884 it was by arrangement reduced to about £223,000,000. Finances of Spain have for many years been in bad condition, owing to civil war, costly efforts to repress Cuban revolt, and bad faith with public creditors. Army in peace about 18,000, home and colonial; in war about 400,000. Navy, 8 ironclads and 258 other vessels. On the deposition of Queen Isabella in 1868 the Cortes elected Marshal Serrano regent, and offered crown to Marshal Espartero, who declined it. Leopold of Hohenzollern was nominated in July, 1870, but on strong opposition of France he resigned (July), and Amadeus of Savoy (October 20th) accepted the crown. On December 28th Marshal Prim was shot at, and died 40 days after. Amadeus was generally well received, in spite of the frequent changes of ministry. Serrano, Zorilla, Malmcampo, and Sagasta succeeding each other in rapid succession. In April 1872 a Carlist insurrection in Navarre was suppressed, and an amnesty proclaimed in June. Zorilla again assumed the ministry. A Republican rising at Ferrol in October was suppressed. King Amadeus abdicated January 1873. The Cortes voted for a republic. Rising of Carlists in Catalonia in March. Abolition of slavery in Porto Rico. The ministry under Figueras seized supreme power. Dissolution of Cortes. On re-election of Cortes, federal republic proclaimed on June 8th. In June a ministry was undertaken by Pi-y-Margall, who was succeeded by Castelar, and subsequently by Serrano. Four principal parties in Cortes, government or democratic, intransigents or irreconcilables, communists and Carlists. The Carlist revolt spread. Murcia and Valencia proclaim themselves independent nations. New constitution (including separation of Church and State, abolition of nobility, seventeen federal states in Spain, two in titles, elective president and Cortes renewed every two years) proclaimed. Valencia is retaken by the government in August. The intransigent vessels attacking Almeria are seized by German and British vessels, and given up to the government. An unsuccessful attack on Alicante was made by the intransigente squadron, which afterwards was repulsed in the attempt to break the blockade of Cartagena. General Moriones defeated by Carlists in October near Bilbao, and again at Somorrostro. Intransigente revolt in Cartagena repressed. Great progress of Carlist revolt in spring of 1874. In December the army pronounced in favour of Alfonso, the present king, who entered Madrid January 25. The country being tired of war generally recognised him, being joined by many of the Carlists, and finally (March 1876) Don Carlos fled to England. A new constitution was agreed to July 1876. An amnesty was proclaimed in February 1877. The insurrection in Cuba, which had been smouldering for eight years, came to an end about the beginning of 1878. The king married his cousin, the daughter of the Duke of Montpensier, in January; he died in June 1879. Jan., Espartero died.

General Martinez Campos, the so-called pacificator of Cuba, returned, and formed a ministry of Liberal Conservatives. Abolition of slavery in Cuba decreed by Cortes. On finding that this reform was likely to cause a large deficit in the budget, the ministry was forced to resign in favour of a Conservative ministry, under Canovas de Castillo. The king married Maria Christina of Austria in November, at the instance of Germany. 1880. Insurrection in Cuba again breaking out was put down, and peace proclaimed (December). Conference of European powers met at Madrid to settle *modus vivendi* with Morocco, and strong note presented to Emperor of Morocco, recommending toleration to Jews and Christians. 1881. Canovas ministry, replaced by Fusionist cabinet under Sagasta. All Spaniards residing abroad for political reasons were proclaimed free to return, and amnesty granted for all press offences. The elections showed overwhelming majorities for the government. A massacre of Spanish settlers at Oran by Algerian rebels occurred, and an agreement arrived at between France and Spain, mutually to indemnify the claims arising out of the Oran massacres and Carlist and Cuban wars. 1882. Commercial treaty with France ratified in May. Negotiations for similar treaty with England broken off on alcoholic test for cheap wines. 1883. Commercial treaty with Germany ratified. In July military pronunciamento at Badajoz, Logrono, and popular rising in Catalonia fomented by Zorilla, leader of Republicans, promptly repressed. The king made a progress in Valencia and the north, and then visited Vienna, Berlin, Munich, and Brussels. The Emperor of Germany invested him with colonelcy of Uhlan regiment at Strasbourg, on which account, on his arrival at Paris, he was insulted by the mob. Apologies were offered by the president, but were not considered sufficient. The discussion which followed hastened the fall of the Sagasta cabinet, which was replaced by a constitutionalist cabinet under Herrera. The apology was subsequently accepted. The Crown Prince of Germany, on behalf of the Emperor, returned the king's visit. A commercial treaty with England concluded. Agrarian terrorist movement in Andalusia. Numerous trials in May 1884. Cabinet defeated on proposal for constitutional reform. Canova's Cabinet (Conservative) came into office. On dissolution the cabinet obtained an increased majority. In August 1885 a dispute arose with Germany as to the possession of the Caroline Islands (*q.v.*) On the news reaching Madrid, an assault was made by the mob upon the German Legation, and the Imperial arms were insulted. Apologies were made for the insult offered to the Legation, and the dispute as to the possession of the islands was referred to the Pope as mediator, under whose advice the sovereignty of the islands was adjudged to Spain, full liberty of trade, etc., being conceded to Germany. A treaty to this effect was signed on November 26th. The British Government, who had previously disputed the Spanish title, will, it is reported, acknowledge the same upon similar concessions. On November 25th, King Alfonso died of consumption, aged twenty-seven leaving two daughters, the eldest of whom is but five years old. Marshal Serrano died November 26th. The Regency has been assumed by the Queen's mother, Queen Christina—the Canovas' ministry having on the decease of the

King given in their resignations, and being succeeded by a Liberal ministry under Sagasta. The prospects of peace are at present extremely uncertain. A military mutiny occurred at Carthagena on January 10th, 1885, which was suppressed. Electoral and financial reforms in Cuba are proposed, to include the consolidation of the debts of the island under the guarantee of the mother country, the revision and reduction of the tariff, and a commercial treaty with the United States. Manifesto of the Spanish bishops. On March 9th the Cortes was dissolved; the new elections for deputies are now (April 7th) proceeding, and hitherto have resulted in the return of the ministerial candidates.

"Sparks, Godfrey." See Noms DE PLUME.

Sparrows. A considerable amount of discussion has recently taken place as to whether the sparrow is or is not a bane to agriculture. On the one side are ranged the sentimentalists, and such ornithologists as regard a bird as a bird, without respect to its doings; on the other are the farmers and the practical agriculturists, who have plenty of proof to adduce that the house sparrow's larcenies represent a serious annual tax on the corn grower. Mr. J. H. Gurney, a well-known ornithologist, in "The House Sparrow" (London, 1885), almost against his bird-loving conscience, gives the results of 694 dissections made in various places and in every month of the year, furnishing strong evidence that the sparrow's harmfulness outweighs the good that he works in common with all other birds. They show that throughout his life 75 per cent. of his food consists of grain of some kind, 10 per cent. of weed seeds, 4 per cent. of green peas (in young birds much more), 10 per cent. of caterpillars, beetles, and other insects. In the same volume Colonel C. Russell shows, with ample proof, that wherever he settles the sparrow dispossesses the house martin (*Chelidon urbica*); that wherever the sparrow is dispossessed the martin reinstates himself and thrives. Sparrows were recently introduced into America, with a view to the destruction of potato beetles and caterpillars; but they have proved a failure, and are now generally regarded as a distinct curse. (Dr. C. E. Coues' "English Sparrow in America," 1885.)

Speaker's Claim of Privileges. See PRIVILEGES OF PEERS AND MEMBERS.

Speaker's Commentary. The. A commentary on the Bible, contributed to by Anglican bishops and clergy; edited by the Rev. Canon Cook, of Exeter; and published by Mr. John Murray, in ten volumes, 1871-81. The plan of the undertaking is said to have originated with Mr. J. E. Denison, Speaker of the House of Commons, which accounts for its title.

Speaker, The. See PARLIAMENTARY PROCEDURE.

Special Licence. The law requires that before the celebration of a marriage according to the rites of the Church of England the banns be thrice published previously in the church where the marriage is to be solemnised. But a licence may be had to dispense with this ceremony. An ordinary licence is issued by the Ordinary or by his surrogate. A special licence is issued by the Archbishop of Canterbury, and empowers the parties to be married at any time, not only in any church or chapel, but in any other meet and convenient place. A special licence is issued from the Faculty Office, Doctor's Commons, and bears a £5

stamp. A special licence and the Ordinary licence are obtained in the same way, but special licence is supposed to be obtainable only by persons of rank.

Species. A purely artificial term used in the classification of plants and of animals. Each genus—as artificial a term as species is divided for convenience' sake into two more species. Originally, whilst the idea of special creation as distinct from evolution (q.v.) was in vogue, a species was regarded as a group of living beings all descended from one primary individual or pair of individuals. Linnæus [1707-8] held the idea of the fixity of species. He defines it thus: "a group of plants or animals so closely resembling one another as to give rise to the belief that they might all be descended from a single ancestor or pair of ancestors." Buffon [1707-88] suggested that one species may be evolved normal from another. Geoffroy St. Hilaire, in 1830, concluded that species are derived from one or more primitive types, and this belief he defended in the French Academy of Sciences against Cuvier. On the struggle Geoffroy looked with the eyes of one that had, himself, seen the new idea and its pregnant consequences. Erasmus Darwin [1731-1802] grandfather of Charles, adopted Buffon's notion, and suggested, as the cause of evolution, the actions and the wants of the living things themselves. Here was the germ of natural selection (q.v.). Lamarck [1744-1829] contended that all species, even man, were the result of descent with modification. With advancing knowledge, more living things became known, and each of them known with greater and greater completeness. In 1859 Charles Darwin (q.v.) published his work on the "Origin of Species." Thenceforth, as species was regarded by the majority of scientific thinkers as an arbitrarily limited group of organisms, resembling one another in the main as to certain arbitrarily chosen characters.

Species, Classification and Geographic Distribution of. See ORIGIN OF SPECIES.

Spectacle Makers, The Worshipful Company of. See CITY GUILDS, THE.

"Spectator, The" (6d. weekly), founded July 5th, 1828. Originally started as a Liberal review, under the editorship of Mr. Kintoul. In 1862 the department of news was altered in form, and reduced to paragraph articles. The *Spectator* is entirely opposed to the concession of Home Rule to Ireland.

Spectroscope. When white light passes through a glass or other prism, it is refracted and decomposed into several kinds of light. This decomposition of the light is called dispersion, the several kinds of light a spectrum and an instrument for studying these phenomena, a spectroscope. The colours of the solar spectrum, when thus examined, are found not to be continuous, but throughout the whole extent of the spectrum are a great number of very dark lines, the most marked of these being known as Fraunhofer's lines. The positions of the lines coincide with bright lines obtained when the light emitted by different metals strongly heated, is examined in the same way. Hence it is inferred that these same metals are present in the sun. The spectroscope has been very useful in the discovery of new terrestrial elements, and also in physiology and pathology, since many of the animal fluids have their characteristic absorption bands, which

re more more or less modified by disease. Luggins and Miller have applied spectrum analysis to the investigation of the heavenly bodies; and Lockyer and Jannsen have determined by this method the true nature of the rotuberances which appear during a solar eclipse. A detailed description of the spectro-scope, with an account of its chief uses, will be found in Schellen's "Spectrum Analysis," Lockyer "On the Spectroscope," or in Roscoe's Lectures on Spectrum Analysis."

Spectrum Analysis. Certain chemical substances, when strongly heated in a nearly colourless flame, such as that of a bunsen burner or blowpipe, impart a peculiar colour to the flame. This colour is different for different elements, and so can be used for the detection of these elements. The metals of the alkalis (sodium, potassium, etc.), and alkaline earths (calcium, barium, etc.), are those which best show these characteristic colours. When these coloured flames are examined by means of a spectro-scope (*q.v.*) they are found to be due to light of different wave-lengths, which, seen by the image of the slit of the instrument being repeated in different parts of the field of view as bright lines of different colours. Thus a spectrum of the yellow sodium flame is shown in the spectro-scope as only one fine bright sodium line, which, however, with a still finer slit, can be resolved into two lines which are exceedingly close together; and the purple flame of potassium is found to give rise to two bright lines, one lying at the violet end; and the other at the red end of the spectrum. No other substances besides sodium and potassium and compounds containing these elements give lines identical in colour and position with these three lines. The different lines produced by these and other substances have been mapped, and their positions determined; so that when one places an unknown substance in the flame and maps the position of the lines produced, it is easy to see whether any particular substance is present or not. Most metals require a high temperature, such as that of the electric spark, or them to emit their characteristic lines. The permanent gases also give characteristic spectra when an electric spark is passed through them. The light of the sun and stars has also been examined in the same way, and they have thus been shown to contain some of the same elements which exist on the earth. This method of analysis is far more delicate than any of the older processes, and so gives a ready method for the detection of minute traces of foreign substances in a nearly pure substance: $\frac{1}{1000000}$ th part of a grain of the metal lithium, and $\frac{1}{100000000}$ th part of a grain of sodium can be detected in this way. Compounds which at one time were thought to be of rare occurrence on the earth have now been shown to be very widely disseminated; and recently several new elementary bodies have been discovered in the waters of mineral springs by means of this method of research.

Spelling Reform. From time to time efforts are made to change the face of our printed language by the adoption of some new system of spelling. The undoubted anomalies of English spelling afford a show of reason to the malcontents, who seem to fail in their contention less from want of argument than from tactical skill. There can be no question that the difficulties of spelling present a

considerable obstacle to school-children at the very threshold of education. To name in succession the component letters of a word gives no clue whatever to the pronunciation; a fact that is recognised in the recommendation of the alternative plan of "Look and Say," according to which the child takes a good look at each word and gets it up by rote, associating its name with its general appearance. But the same objection would equally lie against any new scheme; and a judicious mixture of the two methods of teaching should not fail to cope with the inherent difficulties of the case. It must be acknowledged, indeed, that the labour of training children to read fluently and to spell with accuracy is extremely heavy, and that unfortunately it is not rewarded with the success it deserves, for the percentage of the schoolchildren who can read and spell with fair intelligence and correctness is incredibly small. It does not necessarily follow, however, that such results are altogether due to the mode of spelling. Dr. J. H. Gladstone, a late member of the London School Board, some seven or eight years ago conducted an interesting inquiry with a view to determine on trustworthy grounds the length of time actually spent in the acquisition of spelling and reading, and the proportion of such time fairly ascribable to the difficulties attending our present spelling. He found that the average time allotted to spelling, reading, and dictation amounted to 32·2 per cent. of the time devoted to secular instruction, or 27·3 per cent. of the whole school time; and from this he calculated that "an average English child, spending eight years in school and making the not unusual amount of four hundred attendances per annum, will have spent on an average 2,320 hours in spelling, reading, and dictation," and then will probably be able to pass the moderate requirements of the Government inspector. He further found that "the money cost of acquiring these necessary accomplishments in the elementary schools considerably exceeds £1,000,000 per annum;" to which has to be added the bill for the upper and middle classes, whose "lamentably imperfect" acquirements in this respect are testified to in the results of the Civil Service Examinations. Dr. Gladstone, after elaborate investigation, reached the conclusion that one-half of all this expenditure of time and money was due to our difficulties of spelling. Nor is this the whole case. The time thus lost might be devoted to useful purposes, as in some Continental countries. In *Italy*, for example, children, in spite of a shorter aggregate of school time, learn something of domestic and social economy, and of the laws of health; in *Germany*, literature and science are studied to a certain extent: in *Holland* and *Denmark* they pick up a smattering of foreign languages. If the time spent in the mechanical task of mastering our spelling could be shortened, children could carry from school more useful information than at present, and more power and inclination to acquire greater stores in after life. But the data are unquestionably very indefinite, and the reasoning is very largely from dubious analogy. Further, the difficulties have not yet been fully met, as they might be, by improved means of early education; too many of our "primers" exhibit a hopeless insensibility to the merest elements of the problem. Besides, the argument might be applied to other matters besides spelling, with

results that might well cast doubts on the arraignment of spelling. The reformers have pointed out minor advantages likely to flow from a new system. On the basis of **Mr. A. J. Ellis's phonetic New Testament**, printed in 1849, a reduction of 17 per cent. in letters and spaces has been calculated; so that, as far as printing and paper are concerned, a six-shilling book might be reduced to five shillings. But there is not much force in this argument, in these days of cheap literature. The **correct pronunciation**, it is argued, would also be indicated by a satisfactory reformed method; but it is too much to expect that the written form is to govern the pronunciation, and it seems somewhat unimportant whether it would or not. A reduction of the English **dialects** would follow; it, however, is a matter of no urgent consequence that the English dialects should be reduced. An absolute uniformity of pronunciation and idiom is impossible. The **philological argument** against spelling reform must be abandoned; the greatest philologists both of England and America being among the most ardent advocates of reform. "If our spelling followed the pronunciation of words," says **Prof. Max Müller**, "it would in reality be a greater help to the critical student of languages than the present uncertain and unscientific mode of writing." It is urged that our libraries will be rendered useless, our whole typographical arrangements upset, and that all educational appliances would have to be remodelled. This apprehension rests on the mistaken supposition of a sudden universal and compulsory revolution. The reformers will have some difficulty in overcoming the not unfounded prepossession in favour of what is familiar. The dictionary of **Dr. Johnson** fixed the spelling of English as it never had been fixed before. In this matter every man did as seemed right in his own eyes. Printers, ignorant of the language, manipulated the final words in each line, to suit their convenience. "**Lord Burleigh** did not know how to spell **Lord Leicester's** name, and **Lord Leicester** had eight different ways to choose from." **Shakespeare's** name spells thirty different ways. **Johnson** did not pretend to spell on principle, and indeed he was aware that "many words have been altered by accident or depraved by ignorance." But such is the inevitable course of language, and we cannot keep it invariably squared by rule; and **Johnson** had more sense than to shock people with alarming innovations. Reformers often defeat their purpose by attempting too much. A complete alphabetic apparatus drawn up by **Mr. A. J. Ellis**, or **Mr. Sweet**, is wholly out of the question, however useful in its place as an instrument of philological research. The phonetic system of **Professor Bain**, based on that of **Dr. Clarke**, is as much as could hope for consideration, and is more than is likely to gain acceptance. **Mr. Edward Jones**, of the Hibernian Schools, Liverpool, many years ago advocated a reform which he set out in detail and with much reasonableness. If we must reform to some extent, why not, as he suggested, go back to older spellings in the case of words whose modern spelling "is at variance with the derivation, the pronunciation, the practice of the best old authors, as well as with the analogy of a large number of words of the same class"? Why not make silent changes of a rational nature and leave them to work their

way into acceptance? "Honor," "favor," and the like are slowly creeping forward; "rime" has been boldly adopted for "rhyme"; **Mr. Matthew Arnold** recently preferred "reflexion," "connexion," etc. Very many regard all such changes with intense dislike. Still, if there must be change, what is the most feasible mode of attempting it? A few influential reformers agreeing upon a rational change in one or two representative words would soon set the fashion for a class of words. This seems the most hopeful prospect for reform; the English being most conservative of their language. The ability to conform to the regulation spelling, though not to be despised as a test in care and accuracy, is nevertheless, after all, but a poor return for labour that might be rewarded a hundredfold more richly if expended, not on the mere husk, but on the kernel of language.

Spencer, The Hon. Charles Robert, M.P., younger son of the fourth Earl of Spencer, K.G. Educated at Harrow and Trin. Coll., Cambridge. Is Deputy Lieutenant and J.P. for Northamptonshire. Their presumptive to his half-brother, the fifth Earl Spencer, K.G. Capt. 1st Northants Rifle Corps (1881). Returned in the Liberal interest as member for North Northamptonshire (1880-85); Mid-Northamptonshire (1885); Groom-in-waiting (Feb. 1886).

Spencer, Herbert, English philosopher, b. at Derby 1820. Educated by his father, a teacher of mathematics at Derby, and by his uncle, a clergyman. At the age of seventeen he became a civil engineer, a profession he gave up some seven or eight years later. During this period Mr. Spencer contributed to the *Civil Engineers' and Architects' Journal*, and wrote a series of letters "On the Proper Sphere of Government" for the *Nonconformist* (1842). During the next few years Mr. Spencer wrote regularly for the *Economist*, and for the *Westminster and Edinburgh Reviews*. At the house of Dr. John Chapman, editor of the *Westminster*, Mr. Spencer met, and became the life-long friend of, **George Eliot** and **George Henry Lewes**. His first work of importance, "Social Statics, or the conditions essential to Human Happiness specified, and the first developed," appeared in 1851. In 1855 appeared the "**Principles of Psychology**." Mr. Spencer has always contributed largely to various periodicals, and these articles have, for the most part, been reprinted in pamphlet or book form. In 1882 Mr. Spencer visited America, where he gave several lectures, among others one on "American Nervousness." Mr. Spencer is said to be an evolutionist and agnostic, and in his various works has especially attempted to apply the principles generally known as "Darwinian," and the yet larger ideas of which these are only a part to the phenomena of mind and of society. In his "**First Principles**" he deals with biological problems generally. His chief works are three "series" of "Essays: Scientific, Political, and Speculative" (1858-63, 1868-74), republished from magazines; a series of articles on "Education," republished in a volume as "Education, Intellectual, Moral, and Physical" (1861); "Over Legislation" (1851), "State Education self-defeated" (1851), "A Theory of Population" (1852), "Railway Morals and Railway Policy" (1855), "Principles of Psychology" (1855), "First Principles" (1862) "The Classification of the Sciences"

(1864), "The Principles of Biology" (1864), "Spontaneous Generation and the Hypothesis of Physiological Hints" (1870), "Recent Discussions in Science, Philosophy, and Morals" (1871), "The Study of Sociology" (1872), "Descriptive Sociology" (1873), "Ceremonial Institutions" (1879—being Part IV. of the "Principles of Sociology"), "Data of Ethics" (1879), "Principles of Sociology" (1879), "Political Institutions" (being Part V. of "Principles of Sociology"—1882). Of Mr. Spencer's many recent review articles, a series from the *Contemporary* has been reprinted as "The Man versus the State" (1884), which contains the articles on "The New Toryism" and "The Coming Slavery," an attack on Socialism; "Ecclesiastical Institutions" (being Part VI. of "Principles of Sociology"—1885).

Spencer, Mr. James Ernest, M.P., youngest son of the late Mr. John Spencer, builder of the Phoenix Ironworks, West Bromwich. Connected with the firm of J. E. and S. Spencer, Cannon Street, E.C. He has not long been called to the bar. Returned in the Conservative interest as member for West Bromwich (1885).

Spencer, John Poyntz Spencer, 5th Earl of, K.G., P.C. (creat. 1765; b. 1835; succeeded his father 1857. Educated at Harrow and Cambridge University. Was Lord Lieutenant of Ireland (Dec. 1868 to Feb. 1874, when he was Grand Master of the Order of St. Patrick, and April 1882 to June 1885); M.P. for South Northamptonshire (April to Dec. 1857); Lord President of the Council (1880-83); occupies the same office in the present Gladstone administration (1886). This is a branch of the family of Spencer, Earls of Sunderland, and eventually Dukes of Marlborough.

Spending Department. See CIVIL SERVICE.

Spensley, Mr. Howard, M.P., F.R.G.S., was b. in London 1834. Called to the Australian bar (1864). Member of the Legislative Assembly for the borough of Portland (1871). Afterwards appointed Solicitor-General for the colony in the cabinet of Sir Charles Duffy. Is a Chevalier of the Order of the Crown of Italy. Returned in the Liberal interest as member for Central Finsbury (1885).

Sphygmograph. An instrument for recording the movements of the arterial pulse, which is caused by the propagation of the blood-wave which is generated at each heart-beat through the arterial system. The first instrument of the kind was used by Ludwig in 1847, and the chief forms in use at present are *Marey's*, as modified by Mahomet, and *Dudgeon's*. The instrument consists of a framework by which it can be attached to the arm, fitted with a clockwork, by means of which a strip of smoked paper is carried along at a fixed and uniform rate under the writing-point of the last of an arrangement of levers. A steel spring, which forms part of this lever-arrangement, rests upon the artery from which it is desired to take a tracing, and moves with it, so that the movements are recorded on the smoked paper, and are seen there magnified in a uniform degree. There is also an eccentric, by which a definite amount of pressure on the artery can be regulated and measured. The instrument affords valuable information as to the condition of the heart, of the arterial system, and of the general nerve-tone.

Spicer, Mr. Henry, M.P., of Aberdeen Park, Highbury, was b. in Barnsbury, 1837.

Educated at Mill Hill Gram. Sch., New Coll., St. John's Wood, and London Univ., where he graduated B.A. Is J.P. for Middlesex. Member of the Fishmongers' Co. and Geological Society. Returned in the Liberal interest as member for South Islington (1885).

Spichern. See FRANCE.

Spirit Duty. See REVENUE, THE.

Sponges. See ZOOLOGY.

Sports. See under individual headings.

Sprudel System. A peculiar cure by means of the German spa waters, much affected by wealthy Russians. Owing to the petrifying nature of the waters, the patient is obliged to be careful in diet, and, on no account, to sleep until the process of digestion is completed. The dose is taken after breakfast and lunch.

Spurgeon, Rev. Charles Haddon, the well-known popular Baptist preacher, was b. 1834 at Kelvedon, Essex. Educated at Colchester, and became usher in a school at Newmarket. In 1850 he became a village preacher in connection with a church at Cambridge, under the presidency of the late Rev. Robert Hall, and was known by the *sobriquet* of the "Boy Preacher." Became (1852) pastor of a church at Waterbeach, from whence he removed to New Park Street, Southwark (1853). Preached for some time at the Surrey Gardens and Exeter Hall during the erection of the Metropolitan Tabernacle, Newington Butts (opened 1861), built at the cost of £31,000. Mr. Spurgeon founded (1866) the Pastor's College; the Orphanage at Stockwell (1867), besides almshouses and schools. He is also the editor of the *Sword and Trowel* and the "Treasury of David" (vols. i.—vii.), besides other works, and numerous vols. of sermons.

"Spy." The *nom-de-plume* of the artist who draws the cartoons for "Vanity Fair," a contemporary journal of repute; also a name under which the late Charles Dickens contributed a series of sketches to a magazine with which he was connected in his earlier days. It is a favourite cognomen with writers to various local papers.

Sresedin. See AUSTRO-HUNGARY.

SS. "Nisero," 1884. See HOLLAND.

Stack, Mr. John, M.P. President of the Listowel branch of the National League. Returned as a Nationalist for North Kerry (1885).

Stafford, Augustus Frederick Fitz-Herbert Stafford-Jerningham, 10th Baron (creat. 1640; b. 1830; succeeded his uncle 1885. The 1st peer being attainted and beheaded (1678), his descendants did not inherit the title till the reversal (1825).

Stafford, The Marquis of, M.P., eldest son of the Duke of Sutherland, K.G., was b. 1851. Educated at Eton. Entered the 2nd Life Guards (1870); retired as lieutenant (1876). J.P. for co. Sutherland, and a Director of the London and North-Western Railway. Returned in the Liberal interest as member for Sutherland (1874-85); re-elected 1885.

Stageirite, a name sometimes given to *Aristotle*, owing to his having been born at Stageira, in Greece (B.C. 384).

Stair, John Hamilton-Dalrymple, K.T., 10th Earl of (creat. 1703); Baron Oxenford (1841), by which title he holds his seat in the House of Lords; and 2nd Viscount Dalrymple; b. 1819; succeeded his father 1864. The 1st peer was appointed a Lord of Session in Scotland by Cromwell; was created a baronet by Charles II., and was elevated to the peerage in 1690. The 3rd peer was a field

marshal in the army, and won the battle of Dettingen.

Stalbridge, Richard de Aquila Grosvenor P.C. (1st Barou), youngest son of the second Marquis of Westminster, was b. 1837. Educated at Westminster and at Trin. Coll., Cambridge. Is hon. colonel of the Queen's Dorset Yeomanry Cavalry, J.P. for Flintshire and Dorsetshire, a director of the London and North-Western Railway Company, an associate of the Institute of Civil Engineers, and F.R.G.S. Lord Richard Grosvenor has held office as Vice-Chamberlain of Her Majesty's Household (1872-74), and Patronage Secretary to the Treasury (1880-85). Returned in the Liberal interest as member for Flintshire (1872-85); re-elected 1885. Raised to the peerage 1886.

Stamboul—namely, **Islam-boul**; the town (or city) of Islam; the Turkish name for **Constantinople**, the latter name being Greek.

Stamford, Rev. Harry Grey, 8th Earl of (creat. 1628), son of the late Rev. Harry Grey (who was grandson of the 4th Earl); b. 1812; succeeded his kinsman 1883; is in holy orders.

Stamps. See **REVENUE, THE**.

"Standard, The," first published in 1827. Its present price is a penny, and it is in the front rank of the political journals that rose into importance almost immediately after the abolition of the Paper Duty (1861). Its present circulation is close on a quarter of a million daily. The political principles of *The Standard* are Conservative; but it reserves, and on occasion exercises, the right of sharply criticising the action of the Conservative party. During the American Civil War, the letters of its correspondent "Manhattan" were marvellously popular, and the services of its war correspondents—notably Mr. G. A. Henty, and Mr. Cameron, the latter of whom was killed in the Bayonda desert—have always been prompt and efficient. The present editor, under whom the prosperity of the paper has steadily advanced for the past decade, is **Mr. W. H. Mudford**. *The Evening Standard* (1857) is an evening edition of the morning paper.

Standing Committee. See **PARLIAMENTARY PROCEDURE**.

Standing Orders. This term was originally applied to certain Orders made by either house of parliament to regulate its own procedure. Orders made by either house may in respect of their time for remaining in force be classified under three heads. I. Standing Orders, which are permanent regulations, although liable to be suspended upon extraordinary occasions—*e.g.*, in order to the rapid passing of bills of a pressing nature. II. Sessional Orders, which continue in force only during the session in which they were made, although they may be renewed from year to year. III. Orders indefinite in their duration. Of these three classes the Standing Orders are the most important for purposes of procedure. The Roll of Standing Orders of the House of Lords has been regularly published at intervals. But until 1854 the Standing Orders of the House of Commons, with the exception of those relating to private bills, had never been published by authority. For fuller information consult Sir Thomas May's "Parliamentary Practice." The term "standing orders" has been adopted in the procedure of many bodies other than the houses of parliament.

Stanford, Charles Villiers, who has done

so much for the cause of music at the University of Cambridge, is the son of an accomplished amateur musician. He was born at Dublin in 1852, went to Cambridge as Choral Scholar of Queen's, became Organist of Trinity in 1873, and soon afterwards Conductor of the Cambridge Musical Society. His university career was also distinguished. His operas, "The Veiled Prophet" and "Savonarola," were both first performed abroad, but the latter was also produced at Drury Lane in 1884, with great success. His oratorio, "The Three Holy Children," written for the Birmingham Festival of 1885, is well worthy of his reputation. He is professor of composition at the Royal College of Music, and one of the leaders of advanced music thought.

Stanhope, Arthur Philip Stanhope (creat. 1718); b. 1838; succeeded his father 1875. Was a Lord of the Treasury (Feb. 1874 to Feb. 1876). Was M.P. for Leominster (April to Dec. 1868), and for East Suffolk (June 1870 to Dec. 1876). This family is a branch of the Stanhopes, Earls of Chesterfield, springing from the Hon. Alexander Stanhope (a distinguished diplomatist in the reigns of William III. and of Anne).

Stanhope, Rt. Hon. Edward, M.P., P.C., b. 1841, second son of Earl Stanhope, and descendant of the famous Lord Chesterfield. Entered All Souls', Oxford, where he graduated; Fellow (1863). Called to the bar at the Inner Temple (1865). Returned in the Conservative interest as member for Mid Lincolnshire (1874-85); South Lindsay Division of Lincolnshire (1885). He was appointed by the late Earl of Beaconsfield Parliamentary Secretary to the Board of Trade (1875-78), Under Secretary of State for India (1878-80), Vice-President of the Council on Education (1885), and, on the appointment of the Duke of Richmond and Gordon to the Secretaryship of State for Scotland, Mr. Stanhope was made President of the Board of Trade (1885) in the late Government.

Stanley of Alderley, Henry Edward John Stanley, 3rd Baron (creat. 1839); b. 1827; succeeded his father 1869.

Stanley Rt. Hon. F. A., M.P., P.C., son of the Earl of Derby, was b. 1841. Educated at Eton. Entered the Grenadier Guards (1858), Lieut. and Capt. (1862); retired (1865) with rank of Lieut.-Colonel. Mar. (1864) Lady Constance, dau. of the Earl of Clarendon. Is J.P. for Lancashire and Westmoreland. Returned in the Conservative interest as member for Preston (1865-68); North Lancashire (1868-85); Blackpool Division (1885). Col. Stanley has held the following official appointments: Lord of the Admiralty (1874-77); Financial Secretary to the Treasury (1877-78); Secretary for War (1878-80).

Stanley, Dean. See **BIBLICAL ARCHÆOLOGY**.
Stanley, Mr. Edward James, M.P., was b. 1826. He is a Deputy Lieutenant for Lancashire and J.P. for Somersetshire, in which county he was Sheriff (1880). Returned in the Conservative interest as member for West Somerset (1882-85), Bridgewater Div. (1885).

Stanley, Henry M. An American citizen, b. 1841 (it is said, at Denbigh, North Wales). He became a journalist during the American civil war, being attached as reporter to the staff of the *New York Herald*. In 1868 he was sent to accompany the British expedition into Abyssinia, as war correspondent for that paper. Subsequent to this he made a tour to

the Black Sea, and thence through Persia into India. In 1869 Livingstone, in Africa, had not been heard of for a long time. Mr. Gordon Bennett, proprietor of the *New York Herald*, ordered Stanley "to go and find him." Early in 1871 Stanley left Zanzibar and plunged into the unknown continent. Before the end of that year he had found Livingstone. They explored in company for some months, when Stanley returned to Europe, to meet with much unjust aspersion, ridicule, and incredulity. In 1873-4 he accompanied the British expedition into Ashanti, up to Kumassi, as a war correspondent again. In 1876 the *New York Herald* and the *London Daily Telegraph* conjointly sent him to Central Africa, to take up the thread of Livingstone's discoveries. He left Zanzibar in that year, and in 1877 emerged on the west coast, having circumnavigated Victoria Nyanza, and forced his way in spite of terrible obstacles down the whole course of the hitherto unknown Congo. After this he was no longer an "adventurer" or mere "newspaper man," but became the friend of monarchs, and one of the most famous of explorers. In 1879 the King of the Belgians gave Stanley the command of an expedition formed by the International African Association, for the purpose of exploiting the Congo. Stanley has succeeded in planting stations, and securing steam-navigation upon the upper river, and may be said to have made what is now the Congo Free State (*q.v.*). He remained at work from 1879 till 1885, with the exception of a short absence in 1882; and in 1885 he has handed over to his successor, Sir Francis de Winton, one of the most remarkable achievements in the history of human progress. He is at present (1886) in Europe, but it is possible will return to the State he has founded in the heart of the "dark continent." See CONGO FREE STATE, and BERLIN CONFERENCE.)

Stanley Pool and Falls. See CONGO FREE STATE.

Stansfeld, The Rt. Hon. James, P.C., M.P., LL.B. (Lond.), was b. 1820. Educated at Univ. Coll., London. Called to the bar at the Inner Temple (1849). He has held the following official appointments:—Lord of the Admiralty (1863-64); Under Secretary of State for India (1866); third Lord of the Treasury (1868-69); President of the Poor Law Board (1871); President of the Local Government Board (1871-74). Returned in the Liberal interest as member for Halifax (1859-85); re-elected 1885.

"Star" Hand Grenade. See FIRE EXTINCTION.

Star Motion. See ASTRONOMY.

Star of India, Order of. Established in 1861. Its badge is a light-blue ribbon with white stripes edwards, and with motto, "Heaven's Light our Guide." It has three classes:—

G.C.S.I. . . Knight Grand Commander.

K.C.S.I. . . Knight Commander.

C.S.I. . . Companions.

The present numbers are:—

G.C.S.I. 34 (and 6 Honorary)

K.C.S.I. 71

C.S.I. 144.

cluding the sovereign and the Viceroy of India, who is the Grand Master.

Stars, Fixed. See ASTRONOMY.

Starvation, Death from. See CORONERS' INQUESTS (APPENDIX).

States, The German. See GERMANY.

Stationers, The Worshipful Company of. See CITY GUILDS, THE.

Stationery Office. See CIVIL SERVICE.

Statute of Distribution. See HOTCHPOT.

Stead, Mr. William Thomas, editor of the *Pall Mall Gazette* (*q.v.*), and son of Rev. W. Stead, congregationalist, Howden-on-Tyne, was b. July 5th, 1849; married 1873; educated privately and at Silcoates; apprenticed (1863) to commercial house at Newcastle Quay. Appointed editor of the *Northern Echo* (1871); appointed assistant-editor (1880) to Mr. John Morley (then editor of the *Pall Mall Gazette*); succeeded him as editor-in-chief (1883); interviewed Gordon at Southampton (Jan. 1884); wrote "The Truth about the Navy" (Oct. 1884), and "The Maiden Tribute of Modern Babylon" (July 1885). Was committed to prison (Nov. 1885) for three months, for abducting Eliza Armstrong, and three months for subjecting her to examination by a midwife; his avowed object being to show the public how easily girls could be abducted for immoral purposes.

Stellaland. See BECHUANALAND.

Stenhouse, Dr. See FIRE EXTINCTION.

Stephens, James. See FENIANS.

Stephenson, Lieut.-Gen. Sir Frederick

Charles Arthur, K.C.B., son of the late Major-

Gen. Sir Benjamin Stephenson, G.C.H., was b.

1821. He joined the Scots Guards in 1837, and be-

came lieut.-col. in 1854. He served in the Crimean

war in 1854-5, was A. and D.A.G., and part of

the time Military Secretary to the Commander

in Chief, receiving at the conclusion of the

campaign the medal with four clasps, Legion

of Honour, 4th class, Medjidie, and the Turkish

medal. In China he served with the expedi-

tionary force, receiving the medal and three

clasps. From 1876-9 he commanded the Home

District, and in 1883 was appointed to the

command of the forces in Egypt, during which

he received the honour of knighthood. The

military control in that country involved a

chequered experience. In August 1883 in-

structions were given to reduce the British

force to 6,763 men; but soon afterwards it

became known that Hicks Pasha and his army

had been massacred in the heart of the Soudan

(*q.v.*), and this startling news caused the order

for departure to be countermanded. Then

began the series of operations in the Eastern

Soudan: the fall of Sinkat and Tokar, Baker

Pasha's disaster when proceeding to the relief

of the latter place, and General Graham's first

campaign with the aid of British troops. On

September 9th, 1884, Lord Wolseley arrived

in the country and assumed the chief command,

proceeding from Cairo soon afterwards for

Dongola and Korti. In November the British

forces in Egypt and the Soudan were calculated

at 16,000 men. At the conclusion of the Nile

expedition, Lord Wolseley returned, and left

Alexandria, July 7th, 1885, handing over the

command again to Sir F. Stephenson. On the

26th Dal was evacuated, the withdrawal of

the British northwards being general. In the

following month, however, (Aug. 25th), it was

announced that several thousand rebels had

advanced to New Dongola, and the reduction

of the English troops in the country was again

countermanded. From that time an inter-

mittent frontier warfare has been proceeding.

Gen. Stephenson left on December 8th (1885),

for the front, and at the end of that month the

enemy were severely beaten, and Ginnis occupied.

"Stepniak," the *nom-de-plume* of the well-known Russian *littérateur*. His real name is rumoured to be Professor Dragomanoff, of Kiev University, South Russia (see *Literary Chronicle*, August and September, 1885).

Stern, Doctor, the missionary who was detained as prisoner, with Captain Cameron, the consul and others, by Theodore, king of Abyssinia. After several years of great suffering, and applications to Parliament, the Government formed an expedition against the king, which was placed under the command of Sir C. Napier, resulting in the capture of Magdala and the release of the captives. Dr. Stern died in 1885.

"Sterne, Carus." See NOMS DE PLUME.

Stevenson, Mr. Francis Seymour, M.P., of Wherstead, near Ipswich, was b. 1862. He is the son of the late Sir Wm. Stephenson, K.C.B., formerly Governor of Mauritius. Educated at Harrow and Balliol Coll., Oxford, taking first-class Classical honours. Returned in the Liberal interest as member for North-East Suffolk (1885).

Stevenson, Mr. James Cochrane, M.P. of Westoe, South Shields. Educated at the high school and at the University of Glasgow. Mr. Stevenson is a chemical manufacturer at South Shields; a Life Commissioner appointed under the Tyne Improvement Act, 1850, and chairman of the Board. He is also chairman of the Tyne Pilotage Commission. Returned as member for South Shields in the Liberal interest (1868-85); re-elected 1885.

Stewart of Garlies. See GALLOWAY.

Stewart, Major-General Sir H., K.C.B., b. 1843. Educated at Winchester. Entered the army as ensign in 37th Foot (1863); lieutenant (1865); captain (1868). In 1866 he went to India and served on staff, and during 1872-73 acted as Deputy-Assistant-Quartermaster-General in Bengal. In 1873 he exchanged into 3rd Dragoons, and in 1879 was appointed Brigade Major of Cavalry in Zulu war, and acted as chief of the staff to Sir Baker Russell at storming of Sekukini's stronghold; and in 1880 was military secretary to Sir G. Colley. For his services he received the medal with clasp, and brevet rank as Lieutenant-Colonel. In 1882 he served as aide-de-camp to Viceroy of Ireland; and later, on the formation of the Egyptian expeditionary force, he was appointed Brigade Major of Cavalry under Sir Drury Lowe, and subsequently took part in the famous ride to Cairo. For these services he was appointed extra aide-de-camp to the Queen, Companion of the Bath, and received the Egyptian medal, the medal of the Order of the Osmanieh (3rd Class), and the Khedive's Star. In 1884 he commanded the cavalry in General Graham's force in the Soudan expedition, and on his return from Egypt was made K.C.B. and Assistant Adjutant, and Quartermaster-General at Dover. In 1885 he joined the Egyptian expedition as Brigadier-General; and on being detached for special duty, commanded the troops at the battle of Abu Klea. He was wounded on January 19th, and for his services in this action was promoted to the rank of Major-General. He died of his wound on February 16th, 1885.

Stewart, Mr. Mark John, M.P., was b. at Stevenston, East Lothian. Educated at Winchester, and Ch. Ch., Oxford, where he graduated (1858). Called to the bar at the Inner Temple (1862). Returned in the Con-

servative interest as member for Wigtown Burghs (1874-80), re-elected 1880, but unseated on petition; re-elected 1885.

Stock Exchange The. The first recorded dealings in securities appear to have taken place in 1694, after the first charter had been granted to the Bank of England, giving it the privilege of dealing in bills of exchange, and buying and selling of bullion, etc., and after capital stock could be transferred. The dealings were at first extensively carried on within the walls of the Bank itself; but about the year 1700, the number of dealers had so increased that it became necessary to change their place of meeting. They accordingly went to Change Alley, which they continued to frequent for many years. The practices of the dealers about this time appear to have been so unscrupulous, that in order to check their operations, an act of parliament was passed in 1732, making "time bargains" (see STOCK EXCHANGE TERMS) illegal. The attempt, however, did not succeed, as the Government itself encouraged the system of lotteries and other schemes to raise money. In 1773, a room was engaged in Sweeting's Alley, which was called the Stock Exchange, and where any one might transact business on payment of a fee of sixpence. At the beginning of the present century a committee was formed, and subscriptions raised to erect a building for the special purpose of dealing in public securities. The site chosen was in Capel Court, where the present Stock Exchange stands. After the erection of the new building free admission ceased, and only members, who were elected by ballot could be admitted as members, at a small annual subscription without entrance fee. For the purposes of business, the Stock Exchange is regulated by a committee of thirty members, including the chairman and deputy chairman, called the "Committee for General Purposes." This committee is appointed by a ballot of the members, and holds office for twelve months from the 25th March in each year. The Stock Exchange recognises no transactions with any other parties than its own members, and all must be in accordance with the usages of the "house." The Stock Exchange contains about 2,500 members, who are either **Jobbers** or **Brokers**. The former is a dealer who buys and sells at the market prices, while the latter deals with the jobber on behalf of the public, and is remunerated by commission for transacting the business. **Stock Exchange holidays**—January 1st; Easter Monday; May 1st; Whit Monday; the first Monday in August; November 1st; December 26th; unless specially ordered otherwise by the Committee.

Stock Exchange Official List. The first list of any kind was published in August 1697, under the title of *The Course of Exchange*. It contained six securities, chiefly government stocks, and was published as a private enterprise twice a week from that time down to the year 1787, when a sort of official recognition was apparently extended to it, and Mr. Edward Wetenhall was elected publisher. In July 1803 it was first published by the authority of the committee of the Stock Exchange. Between 1697 and 1747 the number of securities increased to twenty, at which number they remained until January 1st, 1811, when *The Course of Exchange* was increased to more than twice its original size, and Canals, Insurance, Water, and Miscellaneous Companies were included.

The first railway recognised by the Stock Exchange was the Surrey iron railway; and in January 1811 five American stocks first appeared. In August 1816, French 5 per cent. consols were added, under the head of Foreign Stocks. Mines, bridges, and literary institutions were first quoted in January 1817. Scotch securities, which had hitherto been quoted separately, were included in 1827. Up to and including the year 1843 *The Course of Exchange* was published bi-weekly, and was the only list obtainable which showed the daily prices. At the commencement of 1844, when railway securities were becoming of more importance, the "Daily List" was established, and was called the *Daily Railway Share List*. It contained at the outset seventy-six English and eleven foreign railways, and nothing else. In 1847 and 1857 *The Course of Exchange* was again enlarged, and in the beginning of the latter year it was published as a general daily list. At the present time there are about 1,800 different securities quoted in the *Official List*, with a total authorised issue of about £6,100,660,000. Of this amount £2,650,276,000 belongs to foreign government securities; £813,224,000 to British funds; £264,950,000 to Colonial issues; £710,714,000 to English railways; £393,700,000 to American railway securities, and the remaining capital is divided amongst foreign railways, banks, insurance companies, and miscellaneous securities.

Stock Exchange Terms. *Scrip* is an abbreviation of the term subscription, and is applied to the certificates of payment of deposits and calls prior to the issue of the definitive certificates or bonds. **Time Bargains** are transactions entered into by speculators who have no intention of either paying for the stock or shares they have bought, or delivering those they may have sold. A **Bull** buys with the view to a rise in price before a settlement at a future date. A **Bear** sells with the view of buying back at a future date at a lower price. **Contango** is a sum paid by the speculator for the rise, per share or per cent., for the privilege of deferring payment till the next settlement. **Backwardation** is a sum paid by the speculator for the fall, to postpone delivery of stock or shares till the following settlement. **Continuation rates** embrace both contango and backwardation. **Options** are transactions by which a speculator can limit his loss by paying a fixed sum when the bargain is made. They may be either a "put and call," a "put," or a "call." A **put and call** enables an operator to sell or purchase at a fixed price on a certain day. A **put** is a transaction by which a speculator has the option of selling stock at a fixed price at a future time, for which he pays an agreed rate. A **call** is a transaction by which stock can be claimed on a settled day for a certain consideration. **Carrying over** signifies the postponement of payment or delivery of stock or shares till the next settlement day. **Hammering** is the declaration of a defaulting member, which is announced by the "head waiter" striking three blows with a mallet. **Cornering** is an operation by which a scarcity of stock is created, thus producing a fictitious market and preventing a dealer from obtaining what he has previously sold except at greatly enhanced prices. For example, if A sells B a number of shares or stock for delivery on a certain day, and finds he is unable to deliver them, B can have the securities publicly bought

in by the secretary to the committee, or by the clerks of the "house." The sellers of such securities under the circumstances necessarily raise the prices severely against A, who has to pay the abnormally enhanced price. A is then said to be cornered. Amongst the abbreviations used in the Stock Exchange the following are the principal:—**Brums**, a name given to London & North-Western Railway stock; **Berwick** stands for North-Eastern stock; **York "A,"** Great Northern "A" stock; **Dinah**, Edinburgh and Glasgow; **Haddock's**, Great North of Scotland; **Sara**, Sheffield Deferred; **Potts**, North Staffordshire; **Caley**, Caledonian; **Bertha**, Brighton Deferred; **Dover "A,"** South-Eastern Deferred.

"Stonehenge." See NOMS DE PLUME.

"Stonemason, A." See NOMS DE PLUME.

Storey, Mr. Samuel, M.P., was b. at Sherburn, Durham, 1840. Educated at Newcastle-on-Tyne and the Training College, Durham, and became a newspaper proprietor. Is an alderman and J.P. for Sunderland, of which borough he has held the office of Mayor three times. Returned as member for Sunderland in the Liberal interest (1881-85); re-elected 1885.

Story-Maskelyne, Mr. Mervin Herbert Nevil, M.P., M.A. (Oxon), was b. 1823. Educated at Wadham Coll., Oxford, of which he is an Hon. Fellow. He is Professor of Mineralogy in the University of Oxford, and was for many years Keeper of the Mineral Department at the British Museum. Deputy Lieutenant for Brecknockshire, and J.P. for Wilts and Gloucester. Returned in the Liberal interest as member for Cricklade (1880-85); North Wilts (1885).

Storm Warnings. See METEOROLOGY.

Storthing. See SWEDEN.

Stoughton, Rev. John, D.D., author and nonconformist divine, was b. 1807. Educated at Highbury Coll., and Univer. Coll., London. After holding successive churches at Windsor (1832) and Kensington (1843), he became (1875) Professor of Historical Theology in New Coll., London; D.D. Edinburgh (1869). Dr. Stoughton is the author of numerous works, among which are the "*Ecclesiastical History of England*" (6 vols.), "*Ages of Christendom*," "*Progress of Divine Revelation*," "*Golden Legends*" (1886), etc.

Stourton, Baron. See MOWBRAY.

Stradbroke, John Edward Cornwallis Rous, 2nd Earl of (creat. 1821); b. 1794; succeeded his father 1827. Joined the Coldstream Guards; was present at the battles of Salamanca, Vittoria, the Nine and Ninelle, the sieges of Burgos and St. Sebastian, etc.

Strafford, George Stevens Byng, P.C., 2nd Earl of (creat. 1847); Baron Strafford (1835); b. 1806; succeeded his father 1860. A Lord of the Treasury (1834); Controller of the Queen's Household, and Secretary to the Board of Control (July 1846 to Nov. 1847); was summoned to the House of Peers in his father's barony of Strafford (April 1853).

Strafford of Harmondsworth, George Henry Charles Byng, 1st Baron (creat. 1874); eldest son of the Earl of Strafford, and therefore bears the courtesy title of Viscount Enfield, but holds his seat in the House of Lords as Baron Strafford.

Straits of Northumberland (Canada) Tunnel. See ENGINEERING.

Stranch, Colonel. See CONGO FREE STATE.

Strange, Earl. See ATHOLE.

Strathallan, James David Drummond, 8th Viscount (creat. 1686); was b. 1839, succeeded 1886. Is J.P. for Bucks, and J.P. and D.L. for Perthshire; retired lieutenant-col. 6th Dragoon Guards, captain Buckinghamshire Yeomanry Cavalry.

Stratheden and Campbell, William Frederick Campbell, 2nd Baron (creat. 1836 and 1841); b. 1824; succeeded his mother in 1860, and his father in 1861. Was M.P. for the borough of Cambridge (1847-52), and for Harwich (May 1859 to March 1860).

Strathmore and Kinghorne, Claude Bowes Lyon, 13th Earl of (creat. 1677); b. 1824; succeeded his brother 1865; has been a representative peer for Scotland since Aug. 1870. The 1st peer, Patrick Lyon of Glamis, was one of the hostages for the ransom of King James I. of Scotland, delivered to the English in 1424.

Strathnairn, Rt. Hon. Hugh Henry Rose, G.C.B., K.G.C.S.I., Baron, brother of the late Sir William Rose, G.C.B., Clerk to the Parliaments, was b. 1801. He entered the army June 8th, 1820, and rose rapidly, being gazetted major 1826. He served in the Syrian campaign of 1840-41 as adjutant-general to the brigade commanded by Osman Pasha. For his gallantry in a cavalry attack, in which he was wounded, he received a Turkish decoration, and (1841), when Consul-General in Syria, he rescued the Prince of Lebanon and others from the Druses, he was made C.B., obtained the cross of St. John of Jerusalem of Prussia, and a sword of honour from the Sultan. During the Crimean war he acted as Queen's commissioner at the headquarters of the French army, and was wounded before Sebastopol. At the close of the war he became major-general and K.C.B., and received the insignia of the Legion of Honour and the Medjidie. At the critical juncture of the Indian mutiny, Sir Hugh Rose was one of the gallant band who saved our Eastern Empire. Receiving the command of the Central India field force, he gained for the army and himself the glory of a series of brilliant successes. For these services he was made G.C.B. and promoted to the rank lieutenant-general; and on the return home of Lord Clyde, Sir Hugh Rose succeeded him as commander-in-chief, and undertook the difficult task of amalgamating the regular army with that belonging to the East India Company. In 1865 he was appointed general commanding the forces in Ireland, and in 1869 succeeded the late Lord Gough in the command of the Royal Horse Guards. In 1866 he was raised to the peerage as Baron Strathnairn, of Strathnairn and of Shansi, and in 1879 was made Field-marshal. He died October 16th, 1885. Baron Strathnairn was D.C.L. of Oxford and Hon. LL.D. of Dublin. He never married, and the title of Baron Strathnairn becomes extinct.

Strathspey, Baron. See SEAFIELD.

"Stretton, Hesba." See NOMS DE PLUME.
Strike of the Rolls. See ROLL OF SOLICITORS.

Strikes. There is said to be a strike when a large number of operatives, acting in concert, simultaneously refuse to continue to serve under their employers until such time as a grievance is removed or a demanded concession granted. Considering these first theoretically, it is manifest that the right of combination must be conceded to the workmen. There can be no real freedom of contract, where the failure to perfect the contract

will affect both the contracting parties somewhat alike. This cannot be the case where the individual rich capitalist deals with the individual poor workman. The failure to come to terms implies starvation in one case and only a very slight diminution of large profits in the other case. A strike implies that the capitalist has had to treat with all his men collectively, and failure to agree equally injures both parties. The right to combine, therefore, is not only a natural right, but carries with it a restoration of freedom of contract. This of course implies that the combination shall itself be perfectly free, and not forced upon its members by any compulsion, direct or indirect. And English law has now recognised this abstract right by repealing the Combination Laws (1825). But whilst the right to strike cannot be denied, a great question arises as to the wisdom and probable results of adopting such a course. Whether strikes can raise wages or not is a question on which authorities are pretty evenly divided, though the tendency of modern economics seems to be towards a guarded affirmative view. (See Marshall's "Economics of Industry," Book III., chaps. vi. and vii.) But, however this may be, there can be no doubt of the enormous losses inflicted by the process of a strike on all classes, not only of those immediately concerned, but of the community generally. Thus between 1870 and 1879 the actually recorded strikes have amounted to 2,352, and many more must have escaped record. The trades in which the most strikes occurred during that period were—Building trades, 598; metal trades, 390; colliers and miners, 339; textile trades, 277; clothing trades, 163; ships and shipping, 140. Many causes conspire to make it impossible to discover the results of these strikes in the vast majority of cases; and of the 2,352 only 351 can be thus accounted for. Of these, 189 terminated in favour of the employers, 71 in favour of the workmen, and 91 were compromised. Nor can we discover accurately the loss either to wage earning classes or to society as a whole. Mr. Bevan, in the "Statistical Society's Journal" for March 1880, estimates that 110 strikes, of which the results are reliably known, have enforced 577 weeks of idleness, and have cost £4,468,950 in wages alone. The great cotton strike of 1878 is estimated to have cost in wages £2,700,000. The total loss to the community as a whole will of course be vastly greater than this, though incapable of accurate measurement. On the other hand, it must be remembered that, as pointed out by Mr. George Howell, both in his "Conflicts of Labour and Capital" and in "Fraser's Magazine" for December 1879, in many cases a small body of workmen by a strike decide a wages dispute for many labourers besides themselves. Serious strikes have recently taken place in Belgium and France, and are now (April 6th) occurring in America on an alarming scale.

Strikes, Mining. See MINING.

Strong, Mr. Richard, M.P., was b. 1833. He is J.P. for Surrey and a Governor of Dulwich Coll. Returned in the Liberal interest as member for North Camberwell (1885).

Structures, Apparently Useless. See ORIGIN OF SPECIES.

Stuart, Baron. See MORAY.

Stuart, Professor James, M.P., M.A. (Camb.), was b. 1843. Educated at St. Andrews Univ. and Trin. Coll., Cambridge, where he

was third Wrangler (1866). Elected a Fellow of his College (1867). Appointed Professor of Mechanism and Applied Mathematics (1875). Returned in the Liberal interest as member for Hackney (1884-85); Hoxton (1885).

Stuart-Wortley, Mr. Charles Belby, M.P., M.A. (Oxon.), was b. 1851. Educated at Rugby and at Balliol Coll., Oxford. Called to the bar at the Inner Temple (1876); was Secretary to the Royal Commission on the Sale of Benefices (1879-80). Returned in the Conservative interest as member for Sheffield (1880-85); re-elected, Hallam Division (1885).

Sturgis, Mr. Henry Parkman, M.P., was b. at Boston, U.S.A., 1847. Educated at Eton and Christ Church, Oxford. Married (1872) Mary, the fourth daughter of Viscount Hampden, late speaker of the House of Commons. Formerly connected with Baring Brothers, of London and Liverpool. Returned in the Liberal interest as member for South Dorset (1885).

Sturrock, Mr. Peter, M.P., was b. 1820. Educated at Kilmarnock Academy. Formerly a civil engineer. He is engaged in the iron trade in the north of England, and for some time has been agent of the British Linen Company's Bank at Kilmarnock. Appointed Town Treasurer (1856), Dean of Guild (1871), Provost of Burgh (1874). Returned in the Conservative interest as member for Kilmarnock District (1885).

Styx, The River. See EGYPTOLOGY.

Sub-Fendarii. See LAND QUESTION, THE.

Subpœna—literally under penalty (Lat. *sub pœnâ*), the name of a writ requiring something to be done under a penalty for neglect. Subpœnas are of two kinds: the *subpœna ad testificandum*, compelling a witness to give evidence in an action, and the *subpœna duces tecum*, compelling a person who has in his possession documents relevant to the issue of an action to appear and produce them in court. The penalty named in the writ is one of £100.

Succession Duty. See REVENUE, THE.

Sudeley, Charles Douglas Richard Hanbury-Tracy, P.C., 4th Baron (creat. 1838); b. 1840; succeeded his brother 1877. Served in the navy; was present at the siege of Bomarsund; took part in the battle of Fatshan and in the occupation of San Blas; was called to the bar at the Inner Temple (Jan. 1866); was M.P. for Montgomery from Aug. 1863 till his succession to the title. Captain of Gentlemen-at-arms in the present Government (Feb. 1886).

Sudley, Baron. See ARRAN.

Suez Canal. See ENGINEERING.

Suffield, Charles Harbord, P.C., 5th Baron (creat. 1786); b. 1830; succeeded his brother 1853; was a Lord-in-waiting to the Queen (Dec. 1868 to Feb. 1872), when he was appointed a Lord of the Bedchamber to the Prince of Wales. Master of the Buckhounds (Feb. 1886).

Suffolk and Berkshire, Henry Charles Howard, 18th Earl of (creat. 1603 and 1626); b. 1833; succeeded his father 1876. Was M.P. for Malmesbury (May 1859 to Dec. 1868). This is a branch of the Howards, Dukes of Norfolk. The 1st Earl was employed in the search about the Houses of Parliament which terminated in the discovery of the Gunpowder Plot; in 1613 he was Lord High Treasurer of England.

Sugg's Gas Apparatus. See ILLUMINANTS.

Suicide. See CORONERS' INQUESTS (APPENDIX).

Suakin Expeditions, The. Approximate cost of the first and second expeditions (over and above the normal charges for maintenance of the troops, etc., conveyed) and of the charges incurred on account of the Suakin-Berber railway, as far as at present ascertained:—

Extra cost of first Suakin expedition (1884)	£352,352
Extra cost of second Suakin expedition (1885)	2,127,762
Cost of Suakin-Berber railway, including pipe-line, water-supply, etc.	865,369

Total	£3,345,483
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There were also incurred other charges as regards the contingent despatched by the Government of New South Wales. Nothing has been included in the above statement on account of the expense of the ultimate conveyance from Egypt to England of the troops detained in Egypt and at Cyprus after removal from Suakin.—Return showing approximately the strength of the forces employed for the first and second Suakin expeditions, in 1884 and 1885 respectively:—

FIRST EXPEDITION (1884).

	Officers.	Warrant Officers.	Non-Commissioned Officers and Men.	Total.	Horses.
General Staff ...	17	—	4	21	—
Cavalry of the Line ...	41	2	886	929	387
Royal Horse Artillery ...	—	—	—	—	—
Royal Artillery ...	12	—	210	222	—
Royal Engineers ...	5	—	92	97	—
Foot Guards ...	—	—	—	—	—
Infantry of the Line ...	105	5	2,989	3,099	224
Commissariat and Transport ...	11	5	46	62	—
Ordnance Store Corps ...	2	2	19	23	—
Army Pay Department ...	4	—	2	6	—
Chaplains ...	4	—	—	4	—
Veterinary Department ...	2	—	—	2	—
Military Police ...	—	—	—	—	—
Army Signallers ...	—	—	—	—	—
Army Post Office Corps ...	—	—	—	—	—
Medical Staff ...	17	—	65	82	—
Total British Army Troops ...	220	14	4,313	4,547	611
Royal Marines ...	14	—	467	481	—
Naval Contingent ...	12	—	166	178	—
Indian Contingent ...	—	—	—	—	—
New South Wales Contingent ...	—	—	—	—	—
General Total ...	246	14	4,946	5,206	611

SECOND EXPEDITION (1885).

	Officers.	Warrant Officers.	Non-Commissioned Officers and Men.	Total.	Horses.
General Staff ...	47	—	18	65	6
Cavalry of the Line	25	—	605	630	526
Royal Horse Artillery ...	9	—	224	233	195
Royal Artillery ...	9	—	302	311	—
Royal Engineers ...	25	—	646	671	116
Foot Guards ...	85	3	2,426	2,514	—
Infantry of Line ...	74	3	2,619	2,696	86
Commissariat and Transport ...	46	32	648	726	120
Ordnance Store Corps ...	8	12	81	101	—
Army Pay Depart.	14	—	—	14	—
Chaplains ...	7	—	—	7	—
Veterinary Department ...	11	—	—	11	—
Military Police ...	—	—	13	13	13
Army Signallers ...	—	—	13	13	—
Army P. O. Corps	1	—	20	21	—
Medical Staff ...	84	5	562	651	—
Total British Army Troops	445	55	8,177	8,677	1,602
Royal Marines ...	46	—	791	837	—
Naval Contingent	8	—	47	55	—
Indian Contingent	47	—	3,164	3,211	549
New South Wales Contingent ...	30	—	770	800	200
General Total ...	576	55	12,949	13,580	1,811

Sullivan, Sir Arthur Seymour, b. in London, 1842. His father was a military band-master. Sullivan, who was a choir-boy at the Chapel Royal, gained the "Mendelssohn Scholarship" at the Royal Academy of Music, in 1856, and there completed his musical education. He went to Leipzig from 1858 to 1861. His music to Shakespeare's "Tempest" at once struck the public favour on his return in 1862. Constantly writing cantatas ("Kenilworth," 1864, etc.), oratorios ("Prodigal Son," 1869; "Light of the World," 1873), anthems, songs, etc., he yet remained without any specially extensive popularity, till he hit upon a vein of burlesque operetta, which he produced in conjunction with W. S. Gilbert, who wrote the librettos. They are uproariously funny, yet elegantly written, and are as yet unique. The first was "Trial by Jury" (1875), followed by others, among them being "The Sorcerer" (1877), running for 175 nights; "H.M.S. Pinafore" (1878), for 700 consecutive nights, and having probably the greatest success in England and in the United States of any work of the kind; "Pirates of Penzance" (1880); "Patience" (1881); "Iolanthe" (1882); "Princess Ida" (1884); "Mikado" (1885). Sir A. Sullivan received the honour of knighthood (1883), and the Legion of Honour (1878). He is D.C.L. (Oxon. 1876), LL.D. (Camb. 1879), and is one of the Council of the Royal College of Music.

Sullivan, Sir Edward, Lord Chancellor of Ireland, d. April 13th, 1885. He was b. 1822, and was educated at Trinity College, where he distinguished himself by several times obtaining double firsts in classics and science. In 1848 he was called to the Irish bar, and in 1858 made a Q.C. He was made serjeant-at-law (1860), Law Adviser in Dublin Castle (1861), and Solicitor-General (1865). In that year he was returned for his native town of Mallow, which he represented up to 1870. In 1868 he became Attorney-General, and in that capacity discharged the duty of piloting the Irish Church Act and the first Land Act through the House of Commons. In 1870 he was appointed Lord High Chancellor for Ireland.

Sullivan, Mr. M'Donell, M.P. He is connected with the *Nation* journal. Returned as a Nationalist for South Westmeath (1885).

Sullivan, Mr. Timothy D., M.P., was b. 1827. He is editor and proprietor of the *Nation*, the *Dublin Weekly News*, and *Young Ireland*. Returned as a Nationalist for County Westmeath (1880-85); College Green Div. of Dublin (1885).

Sulphate of Ammonia. See ILLUMINANTS.
Sulphuric Acid, hydrogen sulphate or oil of vitriol. A compound of hydrogen, sulphur, oxygen in the proportions of 2, 1, 4. Chemical symbol H_2SO_4 . If sulphur trioxide (SO_3) is combined with water (H_2O), sulphuric acid (H_2SO_4) results. The manufacture of the acid is carried on largely in this country, and also at Nordhausen in Saxony, whence the strongest oil of vitriol comes. In England sulphur, or iron pyrites (a sulphide of iron), is burnt and the vapour of sulphur dioxide formed (SO_2) carried into a leaden room, whose floor is covered with water. Into the same room pass nitrous vapours coming from an apparatus containing nitre and sulphuric acid. These with the sulphur dioxide and the water form sulphuric acid. No attempt is made here to give the chemical changes that occur, on which indeed the chemists themselves are not very well agreed. In the room the acid is not allowed to reach a greater density than 1.55. Then it is transferred to open leaden pans and evaporated until its specific gravity is 1.7. Afterwards further evaporation in glass or platinum vessels yields an acid of density 1.84. Nordhausen sulphuric acid has density 1.9. **Properties.** Liquid, oily-looking, very strongly acid, great solvent of metals. Of much use in the arts. Some of its chief employments are in the making of nitric acid from nitre, the making of hydrochloric acid from common salt, the making of chlorine from salt and of bleaching powder. On bones, coprolites, and the like, it acts in the production of the important manure, superphosphate of calcium, or the acid phosphate $CaH_2(PO_4)$. On common salt, again, it acts in the first stage of the manufacture of common "soda." It is used to dissolve silver alloy, and to dissolve indigo in the making of Saxony blue. Sulphuric acid is very largely employed in manufacturing industries.

"**Summerly, Felix.**" See NOMS DE PLUME.

Sun. See ASTRONOMY.

Sunday Closing Acts. Acts of this name have been enacted at different times for Ireland and Wales. They provide for the total closing on Sunday of houses for the retail of intoxicating liquor. Such liquor, however, may be retailed to persons living in the house or to *bona-fide* travellers. The law in Wales is permanent, but in Ireland is renewed from year to year. In Ireland the Dublin Police

District, Belfast, Cork, Limerick, and Waterford are excepted from the operation of the Act. But in these places houses for the retail of intoxicating liquor may remain open on Sunday only from 2 p.m. to 7 p.m. Bills to apply the principle of Sunday Closing to single English counties have been introduced, but none have become law. The Scotch law of licensing contains provisions to the same effect as those of the Sunday Closing Acts so called.

Sundridge and Hamilton, Baron. See ARGYLL.

Sun Office. See FIRE AND LIFE INSURANCE.

Sunsets, Brilliant. See KRAKATOA.

Sun's Heat, and its Effects. See HEAT.

Supreme Court of Judicature. The Supreme Court was formed by the consolidation of all the superior courts of the kingdom of England, excepting only the House of Lords and the Judicial Committee of the Privy Council. It replaces (a) the Courts of Common Law, the Queen's Bench, Exchequer and Common Pleas, together with the Court of Appeal known as the Court of Exchequer Chamber; (b) the Court of Chancery and the Court of Appeal in Chancery; (c) the Court of Admiralty; (d) the Court of Probate and Court for Divorce and Matrimonial Causes, which replaced the old ecclesiastical courts dealing with similar matters; (e) the London Court of Bankruptcy; (f) the Court of Common Pleas at Lancaster and the Court of Pleas at Durham. The Supreme Court replaces all these by a single court of first instance known as Her Majesty's High Court of Justice, and a single court of appeal known as Her Majesty's Court of Appeal. The High Court of Justice, again, is organised in three divisions—(a) the Queen's Bench Division, in which have been merged the Courts of Queen's Bench Exchequer and Common Pleas. It consists of the Lord Chief Justice of England, who is the president, and fifteen puisne judges; (b) the Chancery Division, under the presidency of the Lord Chancellor of England, and having five puisne judges; (c) the Probate, Divorce, and Admiralty Division, consisting of two judges, the senior acting as president and the junior ranking as a puisne judge. All puisne judges appointed since the foundation of the Supreme Court bear the same title and receive the same salary. Her Majesty's Court of Appeal consists of the Lord Chancellor as president, the Lord Chief Justice, president of the Probate Division and Master of the Rolls, who are members *ex-officio*, and of five ordinary members, known as the Lords Justices. As the three dignitaries first named are usually engaged elsewhere, the working Court of Appeal commonly consists of the Master of the Rolls and the five Lords Justices. The distribution of business between the several divisions of the High Court rests on the general principle that any action may be brought in any one of them. But this rule is modified by law and practice as follows:—(a) The criminal jurisdiction of the Court is exercised solely by the judges of the Queen's Bench Division. (b) Jurisdiction over causes of the following classes is exercised solely by judges of the Chancery Division: (i.) actions for the administration of the estates of deceased persons; (ii.) actions for the dissolution of partnerships; (iii.) actions for redemption or foreclosure of mortgages; (iv.) actions for the raising of portions or other charges upon land, or the sale of land subject to any charge; (v.)

actions to enforce execution of trusts; (vi.) actions for the rectification, setting aside or cancelling of written instruments; (vii.) actions to enforce specific performance of contracts; (viii.) actions for the partition or sale of real estates; (ix.) actions concerning infants and their estates. (c) Jurisdiction over all such causes as would have come before the old Courts of Admiralty, Probate, and Divorce, is exclusively exercised by the judges of the Probate Division. To the above general rule there are other exceptions of less importance. The procedure of the High Court has been formed by a process of selection and improvement out of the different forms of procedure observed by the old Courts which have been merged in it. The only differences of procedure now to be observed in the different divisions are such as have a practical value in the despatch of their different business. In all divisions every cause is as far as possible dealt with by a single judge, in whom are vested all the ordinary powers of the Court. The same forms of pleading are prescribed by the rules, although not adopted in practice by all the divisions alike. In all the divisions evidence is given by word of mouth or by affidavits, as may be most expedient. Trial by jury is becoming infrequent in all civil causes, although still most infrequent in the Chancery Division. The Court of Appeal is the same for all causes, and observes an absolutely uniform procedure, although for the more rapid despatch of business it is divided into two courts, each commonly consisting of three members. The procedure of the High Court and Court of Appeal is set out at large in the Rules of 1883. These, although irregular in form and incomplete in substance, constitute our nearest approach to a code of civil procedure. In the year preceding, the various branches of the Supreme Court were for the first time housed in a single building.

Supreme Court of Judicature (District Courts) Bill, 1883. A bill introduced by Mr. Cowen and other members of the House of Commons, providing for the substitution of District Courts of the High Court for the county courts now existing in certain districts. Each District Court was to consist of (a) a First Division having within the district jurisdiction resembling that of the High Court, but not capable of trying any matrimonial cause, or cause affecting the rights of the Crown, and subject to an appeal to the High Court; (b) a Second Division having jurisdiction in the district resembling that of the county courts. The existing district registries of the High Court were to be annexed to the First Division, and the existing county courts were to be annexed to the Second Division of the District Courts. The right of hearing was to be given to barristers and solicitors equally. In the First Division there were to be one or more district judges, as members of the High Court, and ranking next to the junior judge of that Court, with salaries of £3000 a year apiece, and in the Second Division one or more district registrars with salaries of £1500 a year apiece. The district judges were to be not more than ten; to be chosen from among the county court judges or barristers of ten years' standing; and to be removable upon a joint address to the Crown by the Lord Chancellor and Lord Chief Justice. The district registrars were to be chosen from among the present district

registrars and registrars of county courts, or from barristers or solicitors of seven years' standing, and were to be removable by the Lord Chancellor.

Sussex Fortnight, The. See RACING.

Sutherland, George Granville William Sutherland-Leveson-Gower, 3rd Duke of (creat. 1833); Baron Gower (1703); b. 1828; succeeded his father 1861. Was M.P. for Sutherlandshire (July 1852 to Feb. 1861).

Sutherland, Mr. Thomas, M.P., was b. 1834. Educated at Univ. of Aberdeen. Formerly Chief Agent of the Peninsular and Oriental Steam Navigation Co. in China and Japan; now Chairman. Director of the Suez Canal Co. Deputy Lieutenant of the City of London. Returned as Liberal member for Greenock (1884-85); re-elected 1885.

"Suttleres, S. de." See NOMS DE PLUME.

Swan River. See SOUTH AUSTRALIA.

Sweden. A kingdom under Oscar II., of the house of Bernadotte, by charter of 1815 indissolubly united with the kingdom of Norway without prejudice to separate constitution, government, and the laws of either. If throne become vacant, the Diets of both kingdoms elect, and in default of agreement an equal number of Swede and Norse deputies make an absolute nomination. Affairs common to both kingdoms are administered by council of state, on which both nations are represented. Under the Swedish Constitution of 1809 the executive power is lodged in king, who also possesses legislative power in matters of political administration; in other respects such power is exercised jointly by the Diet, which, possesses a veto on all legislation, and the sole right of taxation. Diet consists of two chambers, the first of 139 members (elected by provinces and municipalities for nine years), the second of 216 members (1 to every 10,000 of population, elected directly for three years). The State religion is Lutheran; all others, except the Jesuits, are tolerated. Revenue (1885) and expenditure, £4,490,000; national debt, £12,500,000; army, in peace, 37,000 men; in war, 161,000 men; navy, 14 armoured and 46 other vessels; area, 170,979 sq. m.; pop., 4,600,000. The King has right of veto; but if a law be thrice passed by three Storthings separately elected, his veto is overridden. The Norse Constitution of 1814, which vests the legislative power in the Storthing, is elected indirectly, the people choosing delegates who elect the Storthing. For business purposes it is divided into the Odelsting, composed of one-fourth of the members, and the Lagthing, consisting of the remainder; all new bills originate in the former. If the two divisions do not agree, the combined house deliberate, and the measure must be passed by a two-third majority. Revenue in 1885, £2,272,000; expenditure, £2,259,000; national debt, £6,000,000; army, in peace, 18,000; in war, 40,000; navy, 4 ironclad and 36 other steamers; area, 122,869 sq. m.; pop., 1,806,900. In 1870 neutrality was observed in the Franco-German war. A reorganisation of the army was proposed, and negatived. In Sept. 1872 the King, Charles XV., died, and was succeeded by the present King, Oscar II., who was crowned in Stockholm in May, and in Drontheim in July 1873. Nothing of importance occurred until 1880, when, in Sweden, an agitation for extension of franchise commenced, and in Norway the king refused his sanction to a proposed amendment in the constitution (that the minis-

ters should take part in and be bound by the proceedings of Storthing) passed in two previously elected Storthings. The Storthing then resolved that the sanction of king was unnecessary; but he, under advice of ministers, claimed an absolute veto, and refused to admit the validity of the resolution. In 1881, the University of Christiania having advised that the king possessed an absolute veto, the king vetoed schemes for army and electoral reform. In return increased allowance to Crown Prince on his marriage was refused, and budget severely criticised. In 1882 the Storthing, being three years old, was dissolved. On the September elections a strong Radical majority was returned. On the meeting of the house in Feb. 1883 the ministry having refused to resign were individually impeached for advising the king, contrary to the interests of the realm, to refuse his sanction to the constitutional amendment admitting ministers to seats in Storthing, etc.; and in Feb. 1885 Mr. Selmer, the prime minister, was found guilty of the charge, and sentenced to be dismissed from his office of Minister of State, and in the following month the junior ministers were also found guilty and fined in various amounts. The king, while ordering the judgment to be carried out, attempted to form another Conservative ministry; but eventually the Sverdrup Liberal cabinet was installed and the king assented to a bill for admission of ministers to the Storthing. In Sweden, beyond the movement in favour of electoral reform, nothing of importance took place during the above period.

Swinburne, Mr. Algernon Charles, son of Admiral Swinburne and Lady J. Henrietta, daughter of Earl of Ashburnham, was b. in London 1837. Educated at Balliol College, Oxford (1857). Visited Florence, and passed some time there. His first productions were two plays, "Queen Mother" and "Rosamond," (1861). These were followed by two tragedies, "Atalanta in Calydon" and "Chastelard," and "Poems and Ballads," which met with severe criticism, and led to a species of literary warfare. His later works are "A Song of Italy," "William Blake, a critical essay," "Siena, a Poem," "Ode on the Proclamation of the French Republic in 1870," "Songs before Sunrise" (1871), in which he glorifies Pantheism and Republicanism; "Studies in Song" (1881); "Notes on Charlotte Brontë"; "Poems and Ballads" (2nd series); "Tristram of Lyonesse" (1882); "A Century of Rondsels" (1883); "Life of Victor Hugo" (1886). He has entered with great warmth into the cause of European freedom, and evinced his warm sympathy with all national movements in this direction, as in his "Song of Italy," in which he apostrophises Garibaldi and Mazzini, etc.

Swinburne, Sir John, M.P., was b. 1834. Late captain R.N. J.P. for Northumberland High Sheriff (1866). Returned as Liberal member for Lichfield Division of Staffordshire (1885).

Switzerland. A republic composed formerly of several independent allied states, but since 1848 a united confederacy. The constitution of 1874 vests supreme legislative and executive authority in two chambers—viz. (1) a State Council of 44 members, chosen two for each canton for three years by the twenty-two cantons of the Confederation; and (2) a National Council of 145 delegates of the Swiss people, chosen also for three years, directly, one deputy for every 20,000 of the population. The united

chambers form the Federal Assembly, to which is confided the supreme government. The executive authority is deputed to a Federal Council of seven members, elected for three years by the Assembly, the president and vice-president of which are the first magistrates of the republic. A supreme tribunal, independent of, although elected for six years by the Assembly, adjudicates upon disputes between the federal government and the cantons, the individual cantons, and all appeals civil and criminal. Each canton is sovereign subject to the federal constitution, possessing its local government, varied in detail, but based on the absolute sovereignty of the people; in some of the smaller cantons the whole male population in assembly make their laws and appoint their officials. In the larger cantons the people by universal suffrage appoint representatives. One unique characteristic of the republic and its cantons is the direct influence exercised by the people, to the consequent exclusion of the representative principle. It is shown in the smaller cantons by the direct popular legislation of the assembled male inhabitants, and in the federation and larger cantons by the almost universal adoption and frequent exercise of the so-called referendum, which may be shortly described as follows: When a law has been passed, the minority (exceeding a certain fixed minimum) is entitled to demand that the law in question shall be submitted to and confirmed by the direct vote of the citizens: *e.g.*, although the constitution abolished capital punishment it was decided by a popular vote taken in 1879 that each canton should be at liberty to re-enact the infliction of such penalty. There is no state religion, but complete religious liberty. The cantons maintain order among the various religious bodies, and no bishopric can be established without the approbation of the republic. Education is free and compulsory. The revenue and expenditure of 1885 about £1,840,000. Debt about £1,319,000, but property of republic is valued at £20,000,000. The united debt of the cantons is about £12,000,000. No standing army permitted by law, but all citizens are liable to serve, and in turn undergo annual military training. The State maintains a highly trained staff and colleges, and in addition military training forms part of the curriculum of every school. The reputation of the Swiss as a warlike nation is deservedly high, and the scientific eminence of the officers is well known. It is estimated that in case of war the confederation could put 250,000 men in the field. Area 15,892 square miles. Pop. about 2,900,000. On the breaking out of the Franco-German war in 1870 neutrality was proclaimed, but an army was rapidly raised to prevent any attempt to seize the bridge at Basle, and to preserve order on the frontiers; and much credit was deservedly earned by their officers for the rapidity with which the troops were raised and disbanded, for their fine appearance, equipment and discipline during the reception and internment of the defeated French troops. In 1873, in consequence of disputes with the Papal See, the nuncio Mermillo was expelled, a Swiss National Catholic Church was constituted, and nineteen priests were deprived for refusing to take the constitutional oath. In 1875 civil marriage and registration was adopted. In 1881, on the assassination of the Tsar, with a view to anticipate any attempt of the Great Powers to restrict the right of asylum, the

Republic subjected all refugees to strict surveillance, and refused to allow the Socialist Congress to be held. In 1882 plans for compulsory education and vaccination under federal inspection were rejected *ad referendum*, more as tending to deprive the cantons of their autonomy than upon their intrinsic merits. In 1883 the appointment by the Pope of Mermillo to the united see of Lausanne, Fribourg, and Geneva was quashed by Federal Council. A protest against the entry of French troops into the neutral territory of High Savoy was successfully maintained. In 1884, on friendly remonstrances from Austria, Germany, and Russia, several anarchists were expelled, but were not given up to their governments in the absence of proof of actual crime.

Sydney, John Robert Townshend, P.C., G.C.B., 1st Earl (creat. 1874); Visct. Sydney (1780); b. 1805; succeeded his father 1831. Was a Lord-in-waiting to Her Majesty (1841-46); Lord Chamberlain to the Queen (June 1859 to July 1866, and Dec. 1868 to Feb. 1874); Lord Steward of the Queen's Household (May 1880 to June 1885); re-appointed Feb. 1886.

Sykes, Mr. Christopher, M.P., second son of the late Sir Tatton Sykes, of Sledmere, was b. 1831. Educated at Rugby and Trin. Coll., Cambridge. He is D.L. and J.P. for the East Riding of Yorkshire. Returned as Conservative member for Beverley (1865-68), E. Yorks. (1868-85); re-elected for Buckrose Division 1885.

Syllogism, in logic, the name for the simplest form of *mediate* inference. It is the essential property of all *mediate* inference that there should be two things whose relations to *the same* third thing are given, from which we can infer their relation to each other. The three things thus given will be named by **logical terms**, and the relations of each of the two to the common third will be given in two propositions called **premisses**, whence their mutual relation will be inferred and expressed in a third proposition, the **conclusion**. The subject of this conclusion is called the **minor term**; its predicate is called the **major term**. The third term, with which both the major and the minor are brought into relation in the premisses, is called the **middle term**. That premiss which brings into relation the major and the middle terms is called the **major premiss**; that which similarly connects the middle and the minor is called the **minor premiss**. Thus in such a syllogism as:

- (1) All dogs are quadrupeds.
- (2) All spaniels are dogs.
- (3) ∴ All spaniels are quadrupeds.

We have "quadrupeds" for major term; "spaniels" for minor term, and "dogs" for middle term. The major premiss, minor premiss, and conclusion are numbered 1, 2, 3, respectively. A syllogism is said to be **valid** when the conclusion properly follows from, and is warranted by, the premisses. If it is not valid, then it constitutes either a **fallacy** if the error deceives the reasoner himself who gives utterance to the syllogism, or a **sophism** if the reasoner who utters it is not himself deceived by it, but only uses it in the hopes of deceiving some one else. This distinction should be carefully noted, since any man may without offence be said to have fallen into a fallacy, but it is a serious reflection on a man's sincerity to accuse him of a sophism.

Synod, The Fifth O. C. See OLD CATHOLICS.
"Syntax, Dr." See NOMS DE PLUME.

T

Taafe, Count Edward Francis Joseph, in the Austrian peerage, and Viscount Taafe of Corren, and Baron of Ballymote, Sligo, in the Irish peerage, was b. at Prague Feb. 24th, 1833, and was brought up as a youth along with the present Emperor Francis Joseph. Count Taafe is a descendant of the powerful nobleman of the same name who proceeded from Ireland, and made a great name in the Germanic Empire. The present Count was appointed Governor of Salzburg in 1863. In 1867 he became Austrian Minister of the Interior and Vice-President of the Cisleithan Ministry. At the latter end of 1869 he served as Minister President, but resumed his former post as Minister of the Interior in the following year. In 1871 he accepted the office of Governor of the Tyrol and Vorarlberg. In 1880 he was summoned to form a new cabinet, and since that year he has continued to hold the post without interruption. The distinguishing feature of Count Taafe's Clerical and Federalistic administration has been to give greater weight to the Slav nationalities, especially the Czechs and the Poles, as well as to the Clericals, in the public affairs of the Empire; and to conciliate the divergent nationalities comprising the kingdom.

Taepings. See CHINA.

Taine, M., French author, philosopher and critic, b. at Vouziers, April 21st, 1828. He received his education at Collège Bourbon, and at the École Normale, in Paris. His first work, "Essai sur l'Intelligence" (1854), was crowned by the Academy. M. Taine's "*Histoire de la Littérature Anglaise*," published in 1864, excited a great sensation among the orthodox and Catholic party in France. By the influence of the Emperor Napoleon III. he was appointed Professor of Art and Aesthetics in the École des Beaux Arts, at Paris. He also wrote "*Notes sur l'Angleterre*." Translated into English, it has been much read. M. Taine became a member of the Academy in 1880.

Talbot, Mr. Christopher Rice Mansel M.P., F.R.S., F.L.S., of Penrice Castle, Swansea, and Margam, Glamorganshire, was b. 1803. Educated at Harrow and Oriel College, Oxford. Lord Lieutenant of Glamorganshire, hon. colonel and Volunteer Battalion Welsh Regiment, and a Director of the Great Western Railway. Mr. Talbot is the "Father" of the House, having sat in parliament since 1830. He declined a peerage offered him (1869). Returned in the Liberal interest as member for Glamorgan (1830-85); re-elected unopposed 1885.

Talbot De-Malahide, Richard Wogan Talbot, 5th Baron (creat. 1831); Baron Talbot de-Malahide (1856), by which title he holds his seat in the House of Lords; b. 1846; succeeded his father 1883.

Talbot, Mr. H. Fox. See ASSYRIOLOGY.

Talbot, Mr. John Gilbert, M.P., D.C.L., was b. 1835. Educated at Charterhouse and Ch. Ch., Oxford. Married Meriel Sarah, daughter of the fourth Lord Lyttelton (1860). Parliamentary Secretary to the Board of Trade (1878-80). Returned in the Conservative

interest as member for West Kent (1868-78); Oxford Univ. (1878-85); re-elected 1885.

Tallow Chandlers The Worshipful Company of. See CITY GUILDS, THE.

Talmud. The Jewish law contained in the Pentateuch came in process of time to need explanation, amplification, and modification. These developments, like the judges' law of the English courts, were considered to be implied in the Pentateuchal code, and by a legal fiction were said to have been traditionally derived from Moses, forming the *Oral Law* as contrasted with the *Written Law* of the Bible. About 200 A.D. this Customary Law of the Jews was codified by Rabbi Jehuda into the six books of the *Mishna*, dealing respectively with Agriculture, Festivals, Women, Damages, Sacred Things, and Purifications. Under these headings the whole life of the Jews was regulated with the minuteness usually found in early and oriental codes, the whole having a religious sanction. After a time the *Mishna* itself was found to need a commentary, and this commentary is termed *Gemara*, the two together, *Mishna* and *Gemara*, forming the *Talmud* (lit. "learning"). Of this there are two forms or editions: the *Jerusalem Talmud*, compiled in Palestine about 400 A.D., and the *Babylonian*, a century later; the latter is the larger, and in greater repute and authority among Jews. The *Talmud* has been aptly compared to a *Hansard*: it gives both the laws and the discussions which led up to them. These discussions are full of digressions, which range over the whole of Jewish life in the rabbinic period, and thus make the *Talmud* of more varied interest than is any other law book. Fables, legends, sermons, songs, anecdotes, witticisms, riddles and parables, are scattered through its pages. The strictly legal part is termed *Halacha*, the more imaginative digressions are termed *Hagada*. (1) The legal part has ruled Jewish life up to the present century, and in many respects rules it still—e.g., as regards the dietary laws, marriages and festivals. It has been codified separately from the *Talmud* by Maimonides in the twelfth, and by R. Joseph Karo in the sixteenth century, in the four parts of the *Shulchan Aruch*, which is the authoritative text-book of all rabbinic tribunals at the present day. These exist under the title of *Beth Din*, or "house of judgment," in every city where Jews congregate, and form an *imperium in imperio*, deciding on ecclesiastical and often on civil matters. (2) The *Hagada*, or legendary portion of the *Talmud*, has of late years attracted considerable attention, owing to the remarkable article on the *Talmud* by the late Emanuel Deutsch, which created such a sensation on its first appearance in the *Quarterly Review* of October 1867. This gave a somewhat exaggerated view of the wit and wisdom of the *Talmud*, and especially called attention to the light thrown upon the origin of Christianity by the information there contained of the thought of Christ's contemporaries and fellow-countrymen. Renewed attention has been therefore given to the *Talmud* by theologians, both in this country and on the Continent, and many translations of parts of the *Talmud* have appeared (e.g., C. Taylor, "Sayings

of the Jewish Fathers": Pitt Press). The style of the Talmud is remarkably difficult, owing to its conciseness, and the lavish use of technical terms. A characteristic trait is the use of Biblical texts, which are turned and twisted in ingenious ways to give support to the various positions laid down. There is a whole literature dating from the Talmudic age, and dealing with the Bible in this way; this is called the *Midrashic* literature, and is derived from the teachings of the same rabbis whose names are mentioned in the Talmud. The whole Talmudic movement is a testimony to the intense veneration of the Jews for the Bible; and though this has led in many instances to an exaggerated respect for the letter of Scripture, and to an over-minute legalism, it also shows signs of being penetrated deeply by the best spirit of the prophets.

Tamil Labourers. See COOLIE.

Tangs. See CHINA.

Tankerville, Charles Bennet, P.C., 6th Earl of (creat. 1714); b. 1810. Lord Steward of the Queen's Household (March 1867), resigned (Dec. 1868); was M.P. for North Northumberland (1832-59); was summoned to the House of Peers in his father's barony of Ossulston (May 1859), and succeeded to the earldom at his death (June 1859).

Tanner, Dr. Charles Kearns Deane, M.P., was b. in Cork about 1850. Educated at Winchester and the Queen's Coll., Cork. He is a Licentiate of the Royal College of Surgeons, Ireland, and of the College of Physicians. Returned as a Nationalist for Mid Cork (1885).

Taoism. One of three religions that have a legal standing in China. The name is derived from a short and remarkable treatise, "The Sacred Text of Tào and its Characteristics," written in the sixth century B.C. by Lao-tsze "the Old Philosopher." He meant by Tào merely the course observed in the order of nature, simply and noiselessly, and as if without purpose, accomplishing its results, and which, he contended, should be the course pursued by the individual man and in all government. He was thus opposed to the multifarious rules prescribed by Confucius for the guidance of the individual and of rulers; and he even advanced to the announcement that good should be returned for evil as the sure way to overcome it. He believed, like the early Chinese fathers, in Heaven as the Supreme Power, but there is nothing in his work of any system of religion having its expression in forms of worship. Nor do we find anything of that kind in the writings of his school for a long time. When Taoism confronts us as a fact and a factor in the country, in the third century B.C., it appears as a congeries of superstitions: belief in the manifestations of spirits, alchemy, astrology, searching for the herb of immortality, concocting of wonderful pills, and the sublimation of the body, so as to make it an ethereal vehicle. One of its professors was created a sort of pope or patriarch of the system in our first century, and the dignity is said to continue in the line of his descendants at the present day. But not even then had Taoism become a religion, nor did it do so till after the appearance of Buddhism in China. The two systems are predominantly antagonistic; but Buddhism was spreading so rapidly among the people, that the earlier superstition, while attempting to conserve its own peculiarities, found it necessary to organise itself after this foreign pattern, with its monas-

tic life, images, purgatorial halls, and drafts on the measureless ages of the past. The "three Precious Ones" of Buddhism became the "three Pure Ones" of Taoism, which, however, have also the title of Shang Ti or God, borrowed from Confucianism. Taoism still clings to its astrology, charms, palmistry, physiognomy, *et id genus omne*, and prosecutes the sublimation of the body; while in its popular treatises it enjoins many of the best portions of both Confucian and Buddhist morality.

Taotais. See CHINA.

Tape Machine, The. See NEWS AGENCIES.

Tasmania. An island south of Australia, separated from it by Bass Strait, 120 miles across. Formerly called *Van Diemen's Land*. Extends 170 miles north to south, and 160 miles west to east, containing 26,215 sq. miles, with a population of 130,541. About 425,000 acres are in cultivation. Capital, *Hobart*, pop. 29,000, in the south. Chief rivers, the Derwent, Huon, and Tamar. Second city, Launceston. Very fertile; mild and salubrious climate; well watered and wooded throughout. Australian flora and fauna. Aborigines extinct. Settled as penal colony in 1803. Severed from Government of New South Wales in 1825. Convict system abolished 1853, and representative government introduced in 1856. Received a constitution and responsible government in 1871. Has a governor, ministry, and two elective Houses of Parliament. Is declared willing to join in the proposed Australian Federation. There are volunteer corps for defence. Education is compulsory and good. Exports over £1,500,000; chiefly wool, tin, grain, fruit and preserves, hides, gold, etc. Vast mineral resources, including valuable tin ores. Revenue £549,262. Tasmania is divided into 18 counties, within which are electoral districts, parishes, and municipalities. Railways through island 215 miles; coach roads and tramways in settled parts. Telegraphs 1,716 miles. Chief industries, sheep-rearing, farming, fruit growing, mining, and timber cutting. There are not many immigrants into the colony, though the advantages offered are very good. The lake and mountain scenery of the centre is very fine. Wealthy Australians visit Tasmania as a sanatorium. There is much rich land yet unoccupied, and obtainable at easy rates. Manufactures very limited. (Consult the official "Progress of the Colony of Tasmania" [Hobart, 1882]; also just's "Tasmaniana.")

Tattenham Corner. See RACING.

Tattersall's. This celebrated sporting resort was founded by Mr. Richard Tattersall in 1766, and so rapid became its progress that the late *Admiral Rous*—the greatest authority, perhaps, that ever lived upon all matters relating to the turf—once referred to it as having grown into "a national institution, with a world-wide fame, and which had lent its patronymic to similar establishments in our colonies, and in many cities of Europe." Mr. Richard Tattersall was born at York, in 1724, and was apprenticed to the wool-combing trade; but soon displaying the Yorkshireman's love for horses, he discarded this occupation for the more congenial task of superintending Mr. Beevor's horse repository in St. Martin's Lane, London. Here he succeeded in favourably impressing the Duke of Kingston, and eventually undertook the entire charge of his Grace's stud. He remained in this position until he began business for himself as an auctioneer; and confining his

sales entirely to horses, he quickly acquired an extensive connection. When forty-two years of age he established what came to be known as "Tattersall's," upon a plot of ground at Hyde Park Corner, which he obtained on a 99 years' lease from the Grosvenor family. A few years later he purchased *Highflyer* from Lord Bolingbroke for 800 guineas, and this proved to be the most remunerative speculation he ever made; indeed, it was to this equine wonder that "Old Tat," as he was familiarly termed, often attributed his after success in life. In an evil hour Mr. Tattersall embarked in newspaper speculations, and became part proprietor of the *Morning Post*. The dissensions attendant upon joint management soon induced him to sever his relation with his co-partners, however; and subsequent to starting the *Morning Herald*, he owned the *English Chronicle*. After many years of not altogether pleasant experience he retired from newspaper life, and took up his residence at Highflyer Hall, near Bury St. Edmunds, in which district his after-dinner toast of "The Hammer and Highflyer" always met with cordial recognition. He died at his town residence, Hyde Park Corner, in 1795, leaving his descendants an unblemished reputation, a flourishing business, and extensive estates adjacent to Ely. "Tattersall's" underwent no change until 1865, when the lease of the old premises expired; and Mr. Edmund and Mr. Richard Tattersall, who then represented the family, failing to obtain a renewal, purchased a site at Knightsbridge Green, close to the original "Corner," where they have erected the present handsome and commodious premises. Members to the subscription rooms are elected by ballot, but gentlemen belonging either to the Jockey, Turf, White's, Brookes's, Boodle's, Arthur's, Guards' or Travellers' Clubs, are exempt from this ordeal. The opening of the new building was celebrated by a banquet at Willis's Rooms, which was attended by over three hundred of the most prominent *habitués* of the turf; and the incidents of this gathering—memorable in racing-story—will be found fully chronicled in Pice's "History of the British Turf."

Taxation of Costs. This is the scrutiny by an officer of the Court of the bill of costs of a solicitor. Its object is to prevent excessive charges for legal service. It may take place either in the course of some judicial proceeding, or under the Attorneys and Solicitors Act, 1843. (1) Taxation of costs in a judicial proceeding is optional where the costs are to be paid by the beaten party, for if he likes he may pay all that is demanded; but it is compulsory when the costs are to be defrayed out of a trust fund or similar property, for the persons interested in the property have a right to protection. (2) Taxation of costs under the Attorneys and Solicitors Act takes place at the request of any one who is dissatisfied with a bill of costs sent in to him by his solicitor. But he cannot insist on the taxation of a bill which he has already paid without protest, or of any bill which he has left unpaid for a year, unless he had special grounds for so doing. If the client applies to have the bill taxed, the solicitor cannot bring an action against him until the taxation is complete. Taxation of costs is performed in the Queen's Bench Division by the Masters, in the Chancery Division by the Taxing Masters; in the Probate Division and in the county courts by the registrars.

Taxes. See REVENUE THE.

Tay Bridge. See ENGINEERING.

Taylor, Mr. Francis, M.P., of Diss, Norfolk, was b. 1845. Educated at Univ. Coll. Sch. and Univ. Coll., London. Formerly belonged to the firm of De Winton and Co., Carnarvon. Is J.P. for Norfolk. Returned in the Liberal interest as member for South Norfolk (1885).

"Taylor, G." See NOMS DE PLUME.

Taylor, Jeremy. See REAL PRESENCE.

Taylor, Sir Henry, was b. 1800. Entered the Navy as midshipman (1814), but retired from it in 1815. Returning home, devoted himself to reading and study. At the age of sixteen he went to London, where he obtained official employment, and (1820) was sent to the headquarters of the Windward and Leeward Islands command, at Barbados. On his return, his department being absorbed in another, he lost his appointment. Returning home he devoted himself to literature, and wrote articles for the *Quarterly Review*. At this time (1823) his lifelong friendship with Southey commenced. In 1824 he entered the Colonial Office, and for forty-eight years he remained in active connection with that Department, retiring in 1872. During his connection with the Colonial Office he rendered valuable public service, and was for those services created (1869) K.C.M.G., the University of Oxford conferring on him the hon. degree of D.C.L. Sir H. Taylor married (1839) the Hon. Theodosia, daughter of the first Baron Montague of Brandon. Of his numerous works the following may be noticed: "Isaac Commenus," his first drama (1827), this being succeeded (1834) by his greatest work, "*Philip van Artevelde*;" "The Statesman" (1836); "*Edwin the Fair*" (1843); "The Chinese Question" (1860); "Crime Considered" (1868); "*Autobiography*" (1885). A collective edition of Sir H. Taylor's plays and poems was published in 1863, and a second collective edition of the whole of his works in 1876. He has left in MS. "*Index Idoneorum*," an alphabetical collection of quotations from Greek and Latin authors, a work of his life. Sir H. Taylor died at Bournemouth, March 27th, 1886.

Tohad Lake. See SOUDAN.

Tcherniaieff, General Michael Gregorovitch, Russian general, and Commander-in-chief of the Servian army; b. October 24th, 1828. He entered the army in 1847, and was made general during the Crimean war, in which he took an active part. He led afterwards a very active life in the East, where he extended the possessions of the Czar. In 1859, he led the expedition against the Khivans, and in 1864, in spite of immense difficulties, he crossed the desert of Turkestan, and succeeded in joining the force coming from Siberia. He captured Tschemkend (1864), and Taschkend (1865). The Emperor of Russia recognised his services by the gift of a sword of honour; but through pressure from the Western powers he retired. In 1864 he became editor of a Pan Slavist organ, the *Russki Mir*. He resumed active life in raising Herzegovina in revolt against the Turkish rule, and in consequence of his successful efforts, was appointed Commander-in-chief of the Servian army. Though beaten in 1876, his revolutionary propaganda led to the Russo-Turkish war, concluded in March 1878, when Prince Milan was created King of Servia.

"Teaching of the Twelve Apostles, The." The manuscript which bears the above title was discovered by Philotheus Bryennos, bishop

of Nicomedia, in the library of the Patriarch of Jerusalem at Constantinople, and published by him in 1883 with full prolegomena and notes. It is remarkable that the book should have been so long unnoticed, when we reflect that it was well known to students that a lost book bearing this title was current in the early Christian Church, and that the library in which it lies has been visited frequently by distinguished Western scholars. The reason of this oversight lies partly in the smallness of the tract in question, which is imbedded in a collection of early patristic matter, so that it escaped the notice of its discoverer until he had spent some years over the rest of the book. The interest aroused by its publication (although somewhat less in England than elsewhere) has been universal, and the book has already been translated into almost all the European languages (Danish, Swedish, Russian, etc.). Nor is this difficult to understand, for the tract is at once the **earliest book of Church discipline** known, probably the most ancient testimony of the currency of the Scriptures of the New Testament; and certainly it affords a most remarkable verification of the accuracy of modern critical methods, since an attempt had been made by a learned German scholar (*Krautitzky*) to reconstruct the book by means of later compilations in which it had been imbedded, and with singular success. The **antiquity** of the book is determined from the following considerations: although the MS. which contains it was only written in the eleventh century (A.D. 1056), the text of which the MS. is a copy is found to be quoted by almost all the early Fathers, from the middle of the second century onwards. It may be taken as proved that it is quoted by *Hermas* and *Barnabas* (both of which writers have often been assigned to the first century), by *Clement of Alexandria*, who quotes it as Scripture, about the close of the second century, by the compiler of the seventh book of the "**Apostolical Constitutions**," and a number of other early writers, including the author of the "**Questions ad Antiochum**," *Ps. Athanasius* "**De Virginitate**," *Ps. Athanasius* "**Syntagma Doctrinæ**," etc. The tract cannot, therefore, be dated very late in the second century, and may well be put much earlier. The **locality of its production** is a matter more in debate; it may, however, be taken for granted that the question lies between two localities—either Syria or Egypt. No substantial reason has been shown for assigning the book to any other quarter, and for either of these there are weighty arguments to be adduced. The **most important English work** on the "**Teaching**" is the shortly forthcoming lectures of *Dr. Charles Taylor* (Master of St. John's College, Cambridge), in which there will be found a very powerful statement of the antiquity of the book, and a suggestion (which has also been made in other quarters) that it is really based upon an earlier book of doctrine and discipline employed by Jewish propagandists for the instruction of their Gentile converts. Everything that can be said in favour of the high antiquity of the book from external criticism is abundantly confirmed by the study of the Christian teaching and practice involved, which are, to say the least, very elementary, and, if no other sources of Christian literature were accessible, would lead us to say that the primitive Christians believed in being and doing good, and in the approach of the Second Advent. The book is

certainly written before the cessation of the primitive "common meal" or *agape*, and earlier than the establishment of episcopacy. On this last point *Bishop Lightfoot* expressed himself as follows to the Church Congress of 1884:—"When our author wrote, 'bishop' still remained a synonym for 'presbyter,' and the episcopal office, properly so called did not exist in the district in which he lived. . . . Such a document cannot but reflect fairly well the beliefs and usages of the writer's age and country."

Tea Duties were in 1865 reduced to 6*d.* in the pound. They were first imposed in 1660. In 1772 the East India Company gave parliament permission to export teas from London to America free of duty; but this was resented by the Americans, as the thin edge of the wedge of Colonial taxation, the right of which they maintained England wanted to assert, and the English ships were, on their arrival in Boston, boarded and their freight thrown overboard. The East India Company lost its monopoly by its extinction in 1834. A new duty was imposed in 1836, at 2*s.* 1*d.* in the pound, which was reduced in 1857 to 1*s.* 5*d.* in the pound.

Tea-room Party.—A term applied to a body of forty to fifty Liberals who on April 8th, 1867, held a meeting in the Tea-room of the House of Commons, and decided to form a coalition that should cause a limitation of the instructions (to be proposed by Mr. Coleridge with regard to the powers of the Committee then engaged upon the Reform Bill) to the law of rating. Both leaders (Mr. Gladstone and Mr. Disraeli) accepted the restriction; but on the notice of motion of Mr. Gladstone for several essential modifications, which Mr. Disraeli stated were in reality but a reversion to the old instructions, the bill was thrown out on the first division by a majority of twenty-one.

Technical Education. Specific instruction required by every person engaged in a particular occupation, in addition to the general education needed, more or less, by all the citizens of a state. In the learned professions this special training is still carefully attended to, as it used to be for all handicraftsmen. But of late years, owing to the introduction of machinery, the growth of large firms, and the establishment of great workshops, the technical training of artisans has, in most trades, become almost nil; while in nearly all other occupations, agricultural operations, engineers' labourers, domestic duties, etc., there has never been any pretence of systematic training for the life-work required. Within the past ten years a considerable amount of interest has been manifested in the technical training of artisans, and large sums have been, and are being, expended in providing for them such instruction as the leading men interested in the subject are beginning to perceive is absolutely necessary. Private manufacturers and public authorities on the Continent have been much in advance of England in establishing good technical schools, and in requiring not only apprentices and journeymen to pass stringent examinations before exercising a trade, but foremen, and in some cases, such as that of builders, employers also. The basis of all technical education lies in the proper instruction of youths. This was formerly secured by a universal system of apprenticeship, with careful provision for due instruction and super-

vision in their indentures. That system, in most trades, has broken down. Even where it still nominally exists, scarcely any provision is made for teaching a lad his trade even by "rule o' thumb," still less for teaching it scientifically; and he has to pick up what knowledge he can by watching and "guessing," sometimes by "treating" a journeyman or foreman. Too often he is kept in one or two grooves during the whole time of his real or nominal apprenticeship, because his labour is thus made more profitable to his master. The remedy is, revival of strictly indentured apprenticeships, whereby the master is compelled to see that the apprentice regularly attends technical classes so many hours a week, and passes an examination at the end of his time, as in Germany, before his indentures are given up to him. In his possession, they then become a certificate for life of his having had a thorough training for his trade. The two chief requirements for securing efficient elementary technical instruction are: First, to employ as teachers men who, to practical knowledge learnt at the bench, in the workshop, factory, or farm, add a thorough acquaintance with the scientific or artistic principles which underlie the practice of their trade; and, secondly, to make instruction in the methods of applying those principles to the actual materials employed in their trade (that is, making models to scale, performing experiments, etc.), to the practical manipulation, in fact, of those materials—a main element in their teaching. For more advanced teaching men of higher attainments, and without the practical experience of regular workmen, may be of great value. It must be distinctly understood that no class-room teaching can be a substitute for workshop training, but that no workshop can give either the scientific knowledge, or its ready application to material, without which all specific trade faculty is merely empirical, rule of thumb, and guess-work. The knowledge picked up at random in the "hurry and drive" of the modern workshop is available at the best only for a particular job, and gives no general principles for the accurate, speedy, and economical execution of other jobs. It is a system as wasteful for the employer as it is clumsy and tedious for the workman, and places the productions of British industry at a great disadvantage in competition with foreign manufactures. The first institution in this kingdom to introduce a sound system of technical education for mechanics was the **Artisans' Institute** in St. Martin's Lane, London, founded in 1874. Its technical classes were transferred in 1878 to the City and Guilds of London Institute in Finsbury, and they have since been adopted in the Polytechnic Young Men's Christian Institute, in Regent Street. In Manchester, Nottingham, and other towns, the principles above described are taking root. A great impetus to technical education has been given by the report and "evidence" presented to Parliament by a Royal Commission appointed in 1882. An "**Artisans' Technical Association**," composed chiefly of mechanics engaged in various trades, is also spreading useful information on the subject, while the City and Guilds' Institute for the advancement of technical education is carrying on the work with valuable results.

Teetotalism. From the word "teetotal," first coined by "Dicky Turner," one of the early Preston teetotalers, in 1833, from which

time it has been used to signify total abstinence from all intoxicating drinks. The first strictly teetotal pledge was drawn up by Joseph Livesey (*q.v.*), and signed by seven of his friends on Sept. 1st, 1832, being subsequently adopted by the **Preston Temperance Society**, which, however, also retained its anti-spirit pledge till 1835. In 1834 the first periodical solely devoted to the interests of teetotalism, the *Preston Temperance Advocate*, was published by Mr. Livesey. In the same year the first exclusively temperance society was formed by the young men of Preston. Temperance missionaries, originally from that town, held meetings and formed temperance societies all over the country; and in 1835 representatives from Yorkshire and Lancashire, at a two-days' conference, constituted the **British Temperance Association** (now **League**), Messrs. J. Silk, Buckingham and Joseph Brotherton, M.P.s, being Vice-presidents. In addition to these gentlemen, the list of early temperance reformers includes several other M.P.s, among whom were Sir Edward Baines, John Bright, and Benjamin Whitworth. Joseph Livesey had in 1835 instituted a total abstinence society in London, and the next year he reorganised a moderation society as the **New British and Foreign Temperance Society**, of which the organ was the *Temperance Journal* (weekly *id.*). Earl Stanhope shortly afterwards became president, and the Society was in 1842 formed into the **National Temperance Society** (now **League**). In 1836, in which year the Western Temperance League was formed in Somersetshire, there were six temperance periodicals. **Father Mathew's** work in Ireland, commencing two years later, resulted in over 1,500,000 people taking the pledge, and the drink revenue being lessened by £750,000. At a great "World's Temperance Convention" in London, in 1846, over 300 delegates attended, from the United States and all parts of the United Kingdom. In the following year the declaration of two thousand medical men on total abstinence appeared. For more than twenty years annual temperance Fêtes have been held at the Crystal Palace, at which many thousands of members and friends of the various temperance organisations have attended from different parts of the country. There are now over seventy temperance papers published in the United Kingdom. At least one-seventh of the population, or about five millions of the inhabitants of Great Britain and Ireland, are now supposed to be teetotalers, of whom half are abstainers attached to some of the many temperance leagues, associations, orders, or societies, a list of which, with other particulars, will be found under **TEMPERANCE ORGANISATIONS**. The argument for Teetotalism appears under **TEMPERANCE**, and the different phases of the question, and the various adjuncts to the movement are treated of separately. —Consult "The Dawn and Spread of Teetotalism" (Livesey's Temperance Tract Depot, 51, Tithebarn Street, Preston); "The Temperance Movement" (Ward, Lock, & Co., Salisbury Square, London, E.C.).

Tehuantepec Ship Railway. See **ENGINEERING**.

Tekke, Massacre, 1881. See **GEOK TEPÉ**.
Telegraph Address, Abbreviated. See **POSTAL TELEGRAPH DEPARTMENT**.

Telegraph Convention, International. See **POSTAL TELEGRAPH DEPARTMENT**.

Telegraph System, Purchase of the, by the State. See NEWS AGENCIES.

Telephone. An instrument by means of which any utterance of the human voice can be transmitted to a distance. Preece has divided these apparatus into two categories—those used for the transmission of music, "tone" telephones, and those employed for conversation. In 1837 an American, named Page, showed that, if an iron bar has its magnetisation frequently altered, musical notes are emitted. Various experimenters improved upon Page's form of apparatus, and in 1874 Elisha Gray, of Chicago, perfected a musical telephone, by which a New York audience could listen to sounds produced at Philadelphia. Professor Graham Bell produced the first apparatus by which spoken words could be transmitted to a distance by means of electricity. His telephone, patented (1876), was first shown at the Philadelphia exhibition. String telephones, consisting of two cylindrical boxes, with parchment or membrane bottoms, connected by a string fixed to the centre of each by means of a knot, had long been known, but these could only be used for short straight distances. The latest form of Bell's telephone consists of a wooden box, containing an iron vibrating plate fixed immediately in front of a steel magnet, round which a coil of insulated copper wire is wound. The distance of the plate from the bar magnet can be regulated by a screw. The two ends of the wire from the bobbin are connected by two line wires, usually wound together, to the corresponding instrument at the farther station. The vibrating plate is coated with varnish or tinfoil to prevent oxidation, and is covered by a mouthpiece, which screws on to the box. The method of working is simple. On speaking at the mouthpiece, the iron plate vibrates, and by its motion alters the magnetisation of the steel rod, which in its turn gives rise to induced currents in the bobbin of wire surrounding it. These induced currents are carried by the line wires to the other instrument, whose steel bar has its magnetisation altered in the same way as the bar in the speaker. The plate of the receiver is thus thrown into vibrations similar to those produced by the speaker. The Bell telephone works well over lines from 200 to 250 miles in length. Gower's telephone is an important modification of the Bell instrument, by which the words uttered by the receiver are audible in every part of a room. When a battery is employed in the circuit, the speaker is called a transmitter, and is made of some conducting substance with variable resistance, such as carbon (see MICROPHONE, PHOTOPHONE, and PHONOGRAPH for other applications of the telephone). The system of telephonic communication has now been introduced into most of the large towns of the old and new world. Subscribers are connected with one another at a central office by switchmen, whose duty consists in answering and connecting wires. The central office in New York exchanges at least one thousand communications every day. In England there are several systems being worked by distinct companies. Amongst scientific applications of the telephone must be mentioned Hughes' induction current balances, by means of which the quality of an alloy or the position of a metallic mass may be determined.

Telephage. A system for the automatic transport of goods by means of electricity, designed by the late Prof. Fleming Jenkin of

Edinburgh, and now being worked by the Telpherage Co. The telpher line is a double one, composed of steel rods attached to posts some distance from the ground by a cross saddle. Upon this line of steel rods are hung the electric locomotive and the skeps for carrying goods on the bob-weight principle. The electric current is supplied to the line and locomotives by a stationary dynamo (see DYNAMO) at the end station. Telpherage locomotives are of various forms: some for the Telpherage Co. have been made by Messrs. Compton; others, with a right-angled nest gearing for the gripping wheels, by Messrs. Easton and Anderson; and lastly one has been designed by Messrs. Ayrton and Perry, in which also a right-angle gearing is employed, but the tightening is effected by wedging, and instead of two discs joined together by a spring, there is a single wheel with a rim in which the cones run. The suspended locomotive is set in motion or brought to rest by a switch connecting its motor with the current. The Telpherage Co. have lately completed their first commercial line, of about a mile in length, at Glynde, in Sussex, for the Newhaven Cement Company. There they have five trains, with locomotives fitted with Reckenzaun motors, to carry over 100 tons daily. The total cost is stated at £1,200, and the working cost about 3d. per ton, the skeps being empty on their return journey. The great practical advantage of this system of transmission is that a telpher line can cross any district without interference with its fields, rivers, or roads, and no ground need be purchased as for rail and tramways.

Tembuland. See KAFFRARIA.

Temperament. See SCALE.

Temperance. On physiological, social, and Scriptural grounds, abstinence from intoxicating drinks is defended and urged by teetotallers. (1) **Physiologically** it is maintained that alcohol is useless and injurious as an article of diet; and taken moderately it is dangerous—since no one can be too sober, and the drunkards' ranks are recruited from the moderate drinkers; and that total abstinence has been proved to be not only safe, but in the highest sense beneficial. (2) **Socially** it is argued that intoxicating liquors are not only personally pernicious, physically and morally, but that, considered from a national point of view, their manufacture and consumption is most injurious. (3) **Scripturally** it is claimed that the Bible, while it commends abstinence, nowhere encourages the use of intoxicating drinks. It is, of course, quite impossible within our limited space to do more than thus simply indicate the three leading arguments. (See TEETOTALISM, LOCAL OPTION, PERMISSIVE BILL.) What has been published on the temperance question is in itself a literature. No complete bibliography has ever been attempted. The list we append, however, gives some of the most important publications on the question. "Bacchus"; "Anti-Bacchus"; Prof. Miller's "Alcohol"; Dr. Carpenter's "Physiology of Temperance"; Dr. Richardson's "On Alcohol"; Dr. Dawson Burns' "Bases of the Temperance Reform"; Dr. Reid's "Temperance Cyclopædia"; Gustafson's "Foundation of Death," and "Thoughts on Moderation"; Hoyle's "National Drink Bill," and "National Resources"; Dr. Lees' "Temperance Text-book," "First Prize Essay," "Reply to Clerical World," and other works; Drs. Burns' and Lees' "Temperance

Bible Commentary"; and the various weekly and monthly temperance papers.

Temperance Life Assurance was first inaugurated in 1849, by Mr. R. Warner, who, his life being refused at the ordinary rate by an insurance company, because of his teetotalism, started the United Kingdom Temperance Provident Institution, which has now an annual income of £421,000, and an accumulated fund of £3,604,000. Only teetotalers were insured till 1850, when a general section was opened. The premium rates are the same in both sections, but the receipts and expenditure of each have been kept entirely distinct, each section sharing its own profits. The association has issued over 81,000 policies, and six bonuses have been declared. From 1866 to 1883, the number of "expected deaths," in the Temperance and the General sections—in the latter of which the ordinary class of insurers are placed—was 2,879 and 4,741. The number of actual deaths was respectively 2,035 and 4,640, or roughly 70 and 97 per cent., thus showing a much larger death-rate in the general section; while the fact that the majority of the Association's policy-holders are to be found in this section indicates the Company's popularity among non-abstainers. The Scottish Temperance Company, whose figures give similar results, was the first which insured teetotalers at reduced rates, and, claiming that the death-rate of the general insuring public is fully one-third higher than that of abstainers, makes to the latter, in both its life and accident departments, an immediate and annual reduction of 10 per cent. Many of the largest of the other insurance companies have recently formed temperance sections, to the policy-holders in which a substantial abatement is made. Abstainers only are insured by the Blue Ribbon Life and Accident Office. The Rechabites and Sons of Temperance Orders (see TEMPERANCE ORGANISATIONS)—though perhaps more accurately described as benefit societies—have yet had some interesting life assurance experience; the *Sanitary Review* recently stating that while the annual death-rate of the Rechabite Order, in certain years, was 7 per 1000, that of the Oddfellows, a non-abstinent Society, was 12 per 1000. Returns show that the annual Rechabite death-rate has never been more than 7½ per 1000, which the mortality returns of the Sons of Temperance indicate is not exceeded by the members of that Order.—See Reports and Prospectuses of the various Companies and Orders.

Temperance Organisations. British Temperance League (see TEETOTALISM), 1835: annual income, £2,000; organ, *Advocate*; offices, 29, Union Street, Sheffield. Western Temperance League: income, £1,700; organ, *Herald*; offices, Redlands, Bristol. United Kingdom Alliance (*q.v.*) National Temperance League, formed 1856, of National Temperance Society, started 1842, and London Temperance League: income, with National Temperance Tract Depot, £12,000; organ, *Record*; offices, 337, Strand, London, W.C. United Kingdom Band of Hope Union, 1855, has affiliated, with its county, district, or town Unions, 11,400 societies, having 1,414,900 members: income, £5,350; organ, *Chronicle*; offices, 4, Ludgate Hill, London, E.C. Midland Temperance League, 1857: income, £500. North of England Temperance League, 1858. Independent Order of Rechabites, Sons of Temperance, and

two Sons of Phoenix Orders are temperance sick benefit societies. The first, established 1855, has a membership of 95,000; capital, £350,000; organ, *Rechabite Magazine*; offices, Lancaster Avenue, Manchester. The member of the Sons number 110,000; capital, £62,666; organ, *Son of Temperance*; offices, 29, Pitt Terrace, Miles Platting. Good Templary (*q.v.*) Sunday Closing Association, 1866: income, £3,000; organ, *Reporter*; offices, 14, Brown Street, Manchester. In Scotland—in addition to Highland Temperance League—the Permissive Bill Association, and Scottish Temperance League: incomes, £2,700 and £6,690; organs, *Reformer*, and *League Journal*; offices, 112, Bath Street, and 108, Hope Street, Glasgow. The Irish Temperance League, and Irish Association for the Prevention of Intemperance, each publish monthly organs. Church of England Temperance Society: income, £9,500; offices, Palace Chambers, Westminster, London, S.W.; organ, *Chronicle*; heads list of denominational societies, among which are the Congregational and Baptist Associations; Wesleyan, Methodist New Connexion, Bible Christian, Swedenborgian, and Friends' Societies; and Free Methodist, Primitive Methodist, and Roman Catholic Leagues, some of which have official organs.—The Medical Temperance Society, British Women's Temperance Association, Blue Ribbon Gospel Temperance Mission (*q.v.*), and Young Abstainers' Union, have each papers of their own. To these may be added the National Deaf and Dumb, Travelers', Police, Cab-drivers', Soldiers', and English and Scotch Railway Temperance Societies. The Society for the Study and Cure of Inebriety, and the National Temperance Federation (Offices, 29, Union Street, Sheffield), have been recently formed, fourteen national societies being affiliated with the latter, which has been chiefly engaged in parliamentary work. In London, the Temperance Permanent Building Society has probably advanced over £3,000,000 since 1854; and the Artisans' and General Dwelling Company, now in its nineteenth year, has built over 4,000 houses on its estates in the suburbs, where no licenses are allowed. During the past few years several Inebriates' Homes have been opened in different parts of the country.—Consult the Organs and Annual Reports of the various Organisations.

Temperance Orphanage. See GOOD TEMPLAR ORDER, THE.

Temperature. See HEAT and METEOROLOGY.

Tempered Scale. See SCALE (MUSIC).

Templemore, Henry Spencer Chichester, 2nd Baron (creat. 1831); b. 1821; succeeded his father 1837.

"**Temple, Neville.**" See NOMS DE PLUME.

Temple, Sir Richard, M.P., Hon. D.C.L. Oxon. (1880). Finance Minister in India (1868-74), Lieut.-Governor of Bengal (1874-77), and Governor of Bombay (1876). Returned in the Conservative interest as member for South Worcestershire (1885).

Templetown, George Frederick Upton, K.C.B., 3rd Visct. (cr. 1866); b. 1802; succeeded his brother 1863. Served in the Crimean campaign, and distinguished himself at the battle of the Alma; was wounded at Inkerman; was M.P. for Antrim (May 1859 to March 1863); elected a representative peer for Ireland (1866).

Tenant-right. A right of property in his farm given to the agricultural tenant by the custom of the country. This right may be resolved into two elements: (1) the right to improvements executed by the tenant and his predecessors; (2) a right not to be disturbed in the holding is so long as therent is paid. Where tenant right exists, it sold by an out-going, and bought by an in-coming, tenant The landlord may, indeed, refuse to accept the purchaser as his new tenant, but only on some reasonable ground, such as a want of capital or skill. The best-known example is the Ulster tenant-right. This has been sold often for half and sometimes for as much as the full fee-simple of the farm. Rights similar to the Ulster tenant-right had been established by custom in various parts of Ireland before the Irish Land Act of 1870 gave them the sanction of positive law. In England, where permanent improvements are commonly made by the landlord, and eviction is not frequent, there is practically nothing which answers to the Ulster tenant-right. Where tenant-right prevails there is practical fixity of rents, and thus the value of the tenant-right varies with the fluctuations of agricultural prosperity. The Irish Land Act of 1881, by fixing rents, has established a legal tenant-right all over Ireland.

Tenants, Various Kinds of. See LAND QUESTION, THE.

Tenasserim. See COOLIE.

Tender, Legal. See LEGAL TENDER.

Tennant, Sir Charles, M.P., was b. 1823. Is a merchant in Glasgow. Chairman of the Tharsis Copper Co. Deputy Lieutenant of the counties of Lanark and Peebles, and J.P. for Peebles. Created a baronet (1885). Returned in the Liberal interest as member for Glasgow (1870-80); Peebles and Selkirk (1880-85); re-elected 1885.

Tennis Championship.

Year.	Winner.	Played at.
1880	J. T. Hartley. . .	Wimbledon
1881	W. Renshaw. . .	Wimbledon
1882	W. Renshaw. . .	Wimbledon
1883	W. Renshaw. . .	Wimbledon
1884	W. Renshaw. . .	Wimbledon
1885	W. Renshaw. . .	Wimbledon

Tennis, Lawn, originally known by the name "Sphairistiké," introduced into England by Major Wingfield in 1874. At first patronised only by men, it has gradually become very popular with ladies, many of whom are very expert players. The ground to be played on is an oblong, 78 ft. x 27 ft. The net 39 ft. from each end. The oblong is divided in half by a line reaching from end to end. The space between the net and base line is also divided by a line 17 ft. from the base and 22 ft. from net. The boundary lines may be marked by the usual means of whitewash. The number of players is unfixed, but is generally confined to two or four. For rules see handbooks.

Tennyson, Alfred Tennyson, 1st Baron creat. 1884; son of the late Rev. George Clayton Tennyson, rector of Somersby, Lincolnshire; b. at Somersby, Aug. 6th, 1809. Educated at Trin. Coll., Cambridge; Hon.

D.C.L. Oxon (1885); has been Poet Laureate (*q.v.*) since 1850. Lord Tennyson, as the chief of English lyric poets, has acquired a wide reputation not only in England, but also in other countries. His first work was a poem, "Timbuctoo," in blank verse, which gained for him the Chancellor's medal. This was followed (1830) by "Poems chiefly Lyrical," "May Queen," and "Locksley Hall," "In Memoriam" (1850); his other chief works being "Idylls of the King" (1858), "Enoch Arden" (1870), "Gareth and Lynette" (1872), "Queen Mary" (1875), "Harold" (1876), "The Cup" (1881), "The Promise of May" (1882), "The Cup and the Falcon" (1884), "Tiresias" (1885).

Tensor. See QUATERNIONS.

Tenterden, Charles Stuart Henry Abbott, 4th Baron (creat. 1827); b. 1865; succeeded his father 1882.

Ten Tribes, The. See ANGLO-ISRAELISM.

Terry, Miss Ellen, b. at Coventry, Feb. 27th, 1848; made her first appearance on the stage during Charles Kean's Shakspearian revivals in 1858, playing the parts of Mamillius in "The Winter's Tale," and Prince Arthur in "King John." When only fourteen she was a member of Mr. Chute's Bristol company, which included Mrs. Kendal, Mrs. Labouchere, Kate Bishop, and several other now prominent members of the profession. She made her *début* in London, March 1863, as Gertrude in "The Little Treasure," and until January 1864 played Hero in "Much Ado about Nothing," Mary Meredith in "Our American Cousin," and other secondary parts. In that year, on her marriage with the celebrated painter, George Watts, R.A., she left the stage, but reappeared again in October 1867, in "The Double Marriage" at the New Queen's Theatre, London; and in the December following played Katherine in "The Taming of the Shrew," on which occasion she first acted with Mr. Irving. In January 1868 she again retired from the stage, and did not reappear until 1874, when she took the character of Philippa Chester in Charles Reade's "Wandering Heir." She afterwards joined Mr. and Mrs. Bancroft at the "Prince of Wales' Theatre, where she acted the part of Portia; and from thence she went to the Court Theatre, where, amongst other characters, she represented Lilian Vavasseur in "New Men and Old Acres," and Olivia in W. G. Wills' play of that name. On December 30th, 1878, she made her first appearance at the Lyceum, and has since, in conjunction with Mr. Irving, played in the longest runs ever known of "Hamlet," "The Merchant of Venice," "Romeo and Juliet," and "Much Ado about Nothing." She has also appeared as Viola in "Twelfth Night," Henrietta Maria in "Charles I.," Camma in Tennyson's tragedy of "The Cup," Ruth Meadows in "Eugene Aram," etc. On May 27th, 1885, "Olivia" was revived by Mr. Irving, with Miss Terry in her original character; whilst one of her greatest successes is that of Marguerite in W. G. Wills' play of "Faust," now running. Miss Terry has been twice married, and is now a widow, her second husband (Mr. Kelly) dying last year.

Tertiary or Kainozoic. See GEOLOGY.

Tetrads. See MONAD.

Tewfik Pasha. Mohammed Tewfik, Khedive of Egypt, b. in 1852. He is the eldest son of Ismail Pasha (*q.v.*), who was obliged to abdicate the throne of Egypt by France and England (1879). Tewfik succeeded his father, and his reign has

been marked by troublous events. (Arabi Pasha endeavoured to overthrow European control in the affairs of Egypt, and forming a conspiracy among the Egyptian officers, he led them to open rebellion. Difficulties and complications with the Powers ensued, and the combined fleets of England and France were sent to Alexandria, and the city bombarded by the British fleet (July 1882). England then commenced military operations in Egypt, and Tewfik placed himself under her protection. The events of the war were fatal to Arabi Pasha, who was exiled. Tewfik Pasha is the *protégé* of England, by whom at present (1886), the affairs of Egypt are supervised.

Texter, Herr. See CHINESE LOAN, NEW GREAT.

Textile Trades, The. See TRADE OF 1885.

Teynham, George Henry Roper-Curzon, 16th Baron (creat. 1616); b. 1798; succeeded in 1842, on the death of his brother, who had enjoyed the title for only six months.

"The Bells." See IRVING, HENRY.

Thebes. See EGYPTOLOGY.

Thee-Baw-Meng, the last King of Burmah, ascended the throne by proclamation, September 19th, 1879, at the age of eighteen. He is the son of the late King **Meng-Dun-Meng**. At first Thee-baw gave fair promise of an enlightened sovereignty; he removed upwards of twenty-seven vexatious taxes, raised money on the crown jewels to pay off arrears due to the troops and other government servants, and offered to renew the treaty made with England (1867); he further conceded the right of the British Government to place adequate guards at their Mandalay and Bhamo Residencies. But not long after he found himself firmly seated on the throne, Thee-baw began to display a very different spirit. In February 1879 he slaughtered eighty-six persons of the blood-royal, and then insisted upon the British representative undergoing the humiliating ceremonies observed by the natives when approaching the King, which Mr. Shaw refused to submit to. About this time **Colonel Browne**, who had now become British Resident, left Mandalay. In September of the same year **Mr. St. Barbe**, the *chargé d'affaires*, abandoned the Residency, and up to the late war no other officer was appointed. Nyoun-yaw, brother to Thee-baw, appeared at Rangoon, intriguing for the throne, encouraged by the condition of anarchy into which the Burmese capital was thrown. In 1882, Thee-baw's vagaries were toned down a little, but he still interfered considerably with freedom of trade by reimposing monopolies, and the Shan tribes for the second time defeated the royal troops. Early in the year he sent an embassy to Simla, to reconsider the treaty, but it ended in nothing. The following year another of the royal princes, who had friends in Mandalay, began to incite the foes of the King, and as he had taken up his residence in the French-Indian settlement of Chandanagor, Thee-baw sent an embassy to France; a similar mission to India, for trade purposes, again falling through. During 1884 the rebellion of the Shans, who were now joined by Kakycus, was carried on more successfully than ever. Negotiations of a more or less secret nature went on with France, and the "Mengoon" Prince, as the plotting brother was called, continued his conspiracy. At the conclusion of the British expedition up the

Irrawaddy (1885) (see BURMAH), and on the occupation of Mandalay, Colonel Sladen, the political agent and the other officers proceeded to arrest Thee-Baw. He was removed with the chief Queen and Queen-mother, and is interned at Arcot, Madras. (See "General Fytche," *Fortnightly Review*, 1879; also *Annual Register*.)

Theogns. See ARMY.

Theistic Church. Its History. Founded in 1871 by a small body of earnest men and women banded together for the purpose of "establishing Mr. Voysey in a church of his own in London, and so enabling him to promulgate there his views concerning God, and God's relation to man, which the decision of the Privy Council has debarr'd him from preaching as Vicar of Healaugh." Among this number were n'v eminent men, notably Dr. Patrick Black, Sir John Bowring, Charles Darwin, Sir Charles Lyell, Andrew Pritchard, Judge Stansfield, the Right Rev. Samuel Hinds, formerly Bishop of Norwich, and many others. Until such time as the proposed church could be secured, the Theists rented St. George's Hall, where religious services were held on Sundays. In 1875, being compelled to leave this place, they took Langham Hall for the same purpose, carrying on the work, and slowly but surely adding to a special fund for purchasing a church when a suitable one could be found. This was accomplished in 1885. In the spring of that year the Theists bought the Scotch Church, in Swallow Street, Piccadilly (built by the Huguenots 200 years ago), where they now worship. **Its main objects.** 1. To promote the adoption of Theistic principles and beliefs. 2. To furnish a reasonable method of satisfying the religious emotions of those persons who can no longer believe in the orthodox dogmas. The first is accomplished by the preaching and printing, and circulation of the Rev. Charles Voysey's sermons, about 900 of which are sold and distributed every week. The second is accomplished by the Service, held morning and evening at the church. This will be found in the prayer-book called the "Revised Prayer Book," compiled and partly written by Mr. Voysey. **Its leading principles.** 1. That it is the right and duty of every man to think for himself in matters of religion. 2. That there is no finality in religious beliefs; that higher views of God are always possible. 3. That it is our duty to obtain the highest truth, and to proclaim it and to detect and controvert errors. 4. That religion is based on morality. 5. That Theism is not aggressive against persons, only against erroneous opinions. **Its beliefs.** 1. That there is one living and true God, and there is no other God beside Him. 2. That He is perfect in power, wisdom, and goodness, and therefore every one is safe in His everlasting care. 3. Therefore that none can ever perish or remain eternally in suffering or in sin, but all shall reach at last a home of goodness and blessedness in Him. 4. That as we have been created for this goodness, it is our wisdom and duty to be as good as we can. The sum total contributed to the work up to the end of 1885 amounts to £22,000, with £1,200 more collected for charities alone. There have been nine marriages, twelve burials, and thirty-three children brought to be dedicated and blessed. A branch of the Theistic Church will commence this year (1886). Mission services are also to be held in the south of London.

"Theory of Foreign Exchanges." See MOSCHEN, RT. HON. G. J., M.P.
Thermodynamics. See HEAT.
Thermo-Electric Batteries. See ELECTRICITY.

Thermometer. See HEAT and METEOROLOGY.

Thermometer, Maximum and Minimum. See METEOROLOGY.

Thermostatics. See HEAT.

Thibet. A country occupying the tableland of the central and eastern portion of the Himalaya, computed to have an area of 651,500 q. miles, and a pop. of 6,000,000. It has been more or less dependent upon China at all times; but the despatch of a Chinese army in 1713 to rescue it from the Eleuths, and of another force in 1792 to repel a Goorkha invasion, gave the dependency of Thibet on China a practical meaning which it had not previously possessed. The nominal ruler of the country is the Dalai Lama, who resides at Lhasa on the Sapanpu; while another Lama, called the Peshu, exercises a powerful spiritual influence in the southern part of the country. His capital is Shigatze. The real ruler of the country is, however, the Chinese Amban, who is in direct communication with the Emperor at Peking. Our recent knowledge of Thibet is derived from the journeys of the two native explorers Iain Sing and A. K.; but the earlier English travellers, Mr. Bogle, Captain Turner, and Mr. Thomas Manning, left the most interesting information we possess about this state and its inhabitants. The French missionaries, Huc and Gabet, who visited Lhasa thirty years after Manning's departure, added some graphic details. The principal trade of Thibet is that in brick tea with western China, valued at half a million sterling, but the indirect trade with India through Nepaul is equally considerable. Great hopes are indulged as to the development of commercial relations between Bengal and Thibet, through the instrumentality of Mr. John Macaulay's mission to Peking; and it is now expected that the additional article of the Yefoo Convention will be at last practically carried out. This expectation may now be realised, as Mr. Macaulay has obtained the Yellow Pass, which will open the Himalayan range to our mission (*Times*, Jan. 6th, 1886). A telegram to the *Times* dated Calcutta Jan. 6th, 1886, stated that two British officers who had left Sadiya on Dec. 12th for Rima in Thibet reached the latter place but were not allowed to enter the town. At this time, as will be seen above, the "permit" had not been obtained. They however made some important geographical observations, confirming the discoveries of "A. K." The question of land relations between India and China is a great problem, which will not be settled at any one point until uniform policy has been agreed upon wherever the two empires touch. The wealth of Thibet consists in its flocks of sheep and yaks, and in its mineral resources. It is already recognised that if Thibetans are to buy Indian tea, its favour will have to be adapted to suit the native palate, which has grown accustomed to the brick tea of Szchuen. Thibet is also of interest in connection with Buddhism; and it is not improbable that the Lamaseries contain some very interesting documents, as well as vast stores of wealth.

Thiers, Louis Adolphe. French statesman and historian, b. at Marseilles, April 15th, 1797.

Educated at the Lyceum of his native town, he began life in Paris in 1821 as a political writer on the staff of the *Constitutionnel*, then the leading journal of the Opposition in Paris. In 1823 he began his "*Histoire de la Révolution française*" (finished 1827). On June 1st, 1830, he founded with Armand Carrel and Mignet the *National*, a most advanced liberal organ. After the Revolution of 1830 he became a Councillor of State under the Orleanist or Constitutional party; in 1832 he was appointed Minister of the Interior in Soult's cabinet, holding afterwards the office of Minister of Commerce and Public Works. He returned to the Ministry of the Interior, and resigned his portfolio Nov. 11th, 1834. A ministerial crisis followed, Thiers being reinstated in his office under the leadership of Mortier. In 1836 he was elected a member of the Academy. From Feb. to Aug., 1836, Thiers was at the head of the Ministry, but differing from the King upon Spanish affairs, he resigned; he became, on March 1st, 1840, President of Council and Minister of Foreign Affairs, but the King strenuously opposing his warlike designs, he gave in his resignation Oct. 29th, 1840. Thiers now retired into private life, occupying himself with his "*Histoire du Consulat et de l'Empire*," published at intervals between 1845 and 1860. He re-entered public life after the Revolution of 1848. The *coup d'état* of 1851 led to his banishment. Re-entering the Chamber in 1863, he became one of the leaders of the Opposition, denounced from its commencement the war of 1870, and predicted its disasters. He refused a place in the Government of National Defence, but rendered signal service in the committee for the defence of Paris. On September 12th he started on a diplomatic mission to London, Vienna, St. Petersburg, and Florence, but returned with empty promises of military intercession. Thiers was equally unfortunate in his negotiations with Prince Bismarck on the subject of an armistice (Oct. 30th to Nov. 6th, 1870). He was appointed the head of the Provisional Government, and his energy and practical good sense were of the greatest service in the peace negotiations with Germany, and in the perilous days of the Commune which shortly followed. On Aug. 31st, 1871, he was elected President of the French Republic by a large majority, a post he held until the parliamentary crisis of May 24th, 1873, when he was succeeded in the Presidency by Marshal MacMahon. For the last time he retired into private life. He died at his residence, St. Germain-en-Laye, Sept. 3rd, 1877.

Third. See SCALE (MUSIC).

Thistle, Knight of the Order of the. Originally established in 1540, and remodelled in 1687. Its abbreviation is K.T., its badge a green ribbon, with motto "*Nemo me impune lacessit*" ("None annoys me with impunity"). There are at present twenty-five K.T.s, including the Sovereign.

Thistleton, Mr. Dyer. See FORESTRY.

Thomas, Mr. Alfred, M.P., a member of the Council of the South Wales University College, is a merchant of Cardiff, of which borough he was Mayor (1882). Returned in the Liberal interest as member for East Glamorgan (1885).

Thomas, Mr. Edward, F.R.S., one of the greatest of English numismatists, was b. in London 1813. His father was the eminent surgeon and member of the Royal Society, H. Leigh Thomas, and from him his son derived his

taste for scientific inquiry. His grandfather was the distinguished Dr. William Cruikshank, the associate of the great John Hunter. Entered the service of the East India Company, and went to India (1832). During the Government of Lord Dalhousie, he distinguished himself so much in the administration of the Punjab, that he was offered the Secretaryship of the Foreign Department in succession to Sir Henry Elliot, which the state of his health prevented him undertaking. In the last years of his stay in India, he was Judge of Delhi and of the Saugor and Nerbudda territories. On his retirement from the service, Mr. Thomas devoted himself with renewed zeal to the study of the antiquities and history of India and Asia generally, and acquired a high reputation both on the Continent and at home. Elected a corresponding member of the French Institute (1873), and subsequently of the St. Petersburg Academy, and a Companion of the Order of the Indian Empire (1884). Mr. Thomas's writings were very numerous: among the most important are his edition of James Prinsep's "Antiquities" (1858), "Early Sassanian Inscriptions, Seals, and Coins" (1868). "Ancient Indian Weights," an introductory essay of the "Numismata Orientalia," of which he was the founder, is the standard authority on the subject. He was joint editor of Sir Henry Elliot's posthumous "History of India." Mr. Thomas died February 10th, 1886.

Thomas, Mr. Miriam L., was b. 1830. In early life studied engraving in Paris and Rome, under his brother, the late Mr. G. H. Thomas. Visited America, and started there the first illustrated American paper. On returning to England entered into business as a wood-engraver. In 1869 the *Graphic* was launched under Mr. Thomas's direction, of which he is still editor. Mr. Thomas is a member of the Royal Institute of Painters in Water Colours.

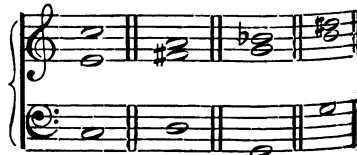
Thompson, Sir H. M. Meysey, M.P., was b. 1845. Educated at Eton and Trinity Coll., Cambridge. J.P. for North and West Ridings; Director of North-Eastern Railway. Returned in the Liberal interest as member for Knaresborough (1880); unseated on petition; elected for Lincolnshire, Brigg Division (1885).

Thoms, William John, F.S.A., d. Aug. 15th, 1885, in his 82nd year. He was b. 1803. He began life as a clerk in the secretary's office at Chelsea Hospital, occupying his leisure hours by contributing to the *Foreign Quarterly Review* and other periodicals. In 1838 he was elected a Fellow of the Society of Antiquaries, and from that year till 1873 he was secretary to the Camden Society. Mr. Thoms was the projector and editor of *Notes and Queries*, which he carried on most successfully for many years. He was for some time Deputy Librarian in the House of Lords.

Thorburn, Robert, A.R.A., miniature painter, d. Nov. 3rd, 1885. He was b. at Dumfries in 1818. Studied art at Edinburgh, under the well-known portrait painter Sir W. Allan; carried off the chief prize at the Scottish Academy, and proceeded to London, where he was admitted a student of the Royal Academy in 1836. He was a constant exhibitor at the Academy, and was elected A.R.A. in 1848. He gained the first gold medal at the great Paris Exhibition of 1855, and was elected an hon. member of the Royal Scottish Academy.

Thornton, Mr. W. W. T. See TRADES UNION.

Thorough Bass. The art of denoting chord by means of figures and other signs made under or over the bass is called Thorough Bass. This term is also used in the same sense as Harmony—that is, to denote the science which treats of the formation and progression of chords. It is also used to denote the art of playing from a figured bass. As used in the first sense given above, it is a kind of musical shorthand, useful, but rather vague. It was invented in Italy about the year 1600. The first work on the subject published in England was by Matthew Lock. Chords are "figured" on the following principle:—The common chord with the root in the bass has one tone a fifth from the bass and another a third from the bass, and this would be called the chord of "5, 3," written thus: $\begin{smallmatrix} 5 \\ 3 \end{smallmatrix}$. Very commonly, however, this position of chord is not figured—the omission of figure being understood to represent such a position. The first inversion has a sixth and a third from the bass, and is called the chord of "6, 3," or shortly, "6." The second inversion has a sixth and a fourth from the bass, and is figured $\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}$. On the same principle a discord of the seventh would be called "8, 7, 5, 3," abbreviated "7"; the same in its first inversion "6, 5, 3," or shortly, "6, 5"; the same in its second inversion "6, 4, 3," abbreviated "4, 3"; and the same in its third inversion "6, 4, 2," shortened "4, 2." A discord of the fourth is called "5, 4," shortened "4," the first inversion of same "7, 4," the second inversion of same "5, 2." A stroke through a figure directs the raising of the interval by a semitone. An accidental standing alone denotes a corresponding alteration of the third of the chord. Horizontal lines denote the continuance of the harmony of the previous chord. In many of the scores of the older masters the harmony is represented by a bass note accompanied by figures. The performers had therefore to have a knowledge of the system in order to be able to play the music as intended by the composer. Thus the chords



may be thus expressed:—



The chief defect of the system is its vagueness. Key-relationship is the great principle of modern harmony, and this principle figured bass fails to give any indication of. Modern harmonists, especially in Germany, adopt a different system of nomenclature which has the great advantage of showing this most important matter—key-relationship—clearly. The system of denoting chords employed in the Tonic Sol-fa method is very clear on this point.

Thought-Reading. A branch of the art of mesmeric influence, the exponents of which profess, while blindfolded, and ostensibly without the aid of confederates, or collusion with the object of their skill, to find articles hidden arising the professor's absence; to give the numbers of bank notes, and various other levertricks. Their mode of procedure is to hold the hand and pulse of the patient during the display of the art, and they profess to be able to discover, by a mesmeric sympathy, what is required. The principal exponents of the art are Messrs. Irving Bishop, Stuart Cumberland, and Madame Card, and others.

"Three F.'s." When Mr. Michael Davitt (*q.v.*) raised the standard of the Irish Land League about 1880, the demands of the Irish tenantry were limited to **Free Sale, Fixity of Tenure, and Fair Rents**. The vicissitudes which attended the movement, and the crimes which disgraced the cause, are matters of history. Davitt was arrested and sent back to complete his term of penal servitude, which was unexpired, on the terms of his ticket-of-leave. But the three-fold claim was not allowed to drop in the absence of the originator of the League; and it was found, when Mr. Gladstone introduced the Land Bill of 1881, that these terms had been well considered. The establishment of the Land Court, with Judge O'Hagan at its head, was the signal for a general assault upon agricultural rents in Ireland. Thousands of claims were sent in, and soon the cry was raised that in the matter of rent reduction alone the Commissioners had more than they could do. Assistant-Commissioners were appointed; and in spite of the satirical prophecy of the enemies of the Act—that it would make the fortune of the lawyers, for the whole country would soon be steeped to the ears in litigation—the circuits were travelled with considerable success. In the vast majority of instances "Fair Rents" implied substantial reductions. Without following the footsteps of Irish history further, it may be stated that the addition of the Fealty clause to the Land Act, and the adoption of the Arrears Act, did so much for Ireland that the other "F.'s" were not heard of again, except in the form of a claim of entire ownership of the land, and "No Rent," which have developed into a demand for Home Rule (*q.v.*) pure and simple.

Thurlow, Thomas John Hovell-Thurlow **Summing-Bruce**, P.C., 5th Baron (creat. 1792); b. 1838; succeeded his brother 1874. Has occupied several diplomatic posts; was Lord-in-waiting to the Queen (Sept. 1880 to June 1885). Author of works entitled "The Company and the Crown," "Trades Unions Abroad," etc. Paymaster-General (Mar. 1886).

Tilbury Deep Water Docks, The. See **ENGINEERING.**

Timbuktu. See **SOUDAN.**

"Time," a monthly magazine (1851). Contains serial, with articles on subjects of social, political, and general interest. In addition, a summary of the political events for the month is given, with reviews of current literature, and a classified bibliography of the best new books published each month. Editor, E. M. Abdy-Williams. (New series) 1885).

Time, "Standard." See **PRIME MERIDIAN.** **"Times,"** The, is the representative English political daily paper. It was first published under the title of *The Daily Universal Register*, on January 1st, 1785, at 24d., which name was

changed to *The Times* on January 1st, 1788. Its circulation is said to be about 50,000 at the present day.

Editors and Years of Appointment.

Dr. Stoddart ("Dr. Slop" of MOORE, retired)	1812
Thomas Barnes (died)	1817
J. T. Delane (retired)	1841
Professor Thomas Chenery	1877
G. E. Buckle (present Editor)	1884

Tin. See **MINING, and TRADE OF 1885.**

Tinplate Workers, The Worshipful Company of. See **CITY GUILDS, THE.**

Tipping, Mr. William, M.P., of Brasted Park, Kent, was b. 1816, at Liverpool. Is J.P. for Lancashire, the West Riding of York, and Kent. He is a director of the London and North-Western Railway. Returned in the Conservative interest as member for Stockport (1868-74). Re-elected 1885.

Tissandier, Croce-Spinelli and Sivel, MM. See **BALLOONING.**

Title by Deed. See **LAND QUESTION, THE.**

Titles of Courtesy. The eldest son of a duke, a marquis, or an earl, takes by courtesy the second title of his father, which is generally, but not always, the next in degree. Thus the eldest son of the Duke of Devonshire takes the courtesy title of Marquis of Hartington, but the present Earl of Derby was Lord Stanley during the lifetime of his father, the second title being, not viscount, but baron. Where the second title is of the same name as the first it is dropped, to avoid confusion; for example, the Marquis of Salisbury is also Earl of Salisbury, so his eldest son is known as Viscount Cranborne. Younger sons of dukes and marquises prefix the courtesy title of lord, and younger daughters of earls, as well as of the higher degrees of nobility, the courtesy title of lady, to their Christian and surname, and the daughters may retain it after marriage with the altered surname. The courtesy title of master is given in Scotland to the eldest son of a baron. In the following list the first column gives the courtesy title which is usually taken by the eldest son of a duke, marquis, or earl, but it will be borne in mind that in many cases the courtesy title is not in present use because the peer has no son. Thus what was once a familiar title to English ears, the Marquis o' Granby, has long been in abeyance as a courtesy title, the Duke of Rutland's heir presumptive being his brother, Lord J. Manners, M.P.

Aberdour L.	Morton E.
Aboyne E.	Huntly M.
Acheson V.	Gosford E.
Adare V.	Dunraven E.
Alexander V.	Caledon E.
Alford V.	Brownlow E.
Altamont E.	Sligo M.
Althorp V.	Spencer E.
Amberley V.	Russell E.
Ancrum E.	Lothian M.
Andover V.	Suffolk E.
Anson V.	Litchfield E.
Apsey L.	Bathurst E.
Arundel & Surrey E.	Norfolk D.
Ashley L.	Shaftesbury E.
Baring V.	Northbrook E.
Bective E.	Headfort M.
Belfast E.	Donegal M.
Belgrave V., grandson of	Westminster D.

Bennet <i>L.</i>	Tankerville <i>E.</i>	Dursley <i>V.</i>	Berkeley <i>E.</i>
Berehaven <i>V.</i>	Bantry <i>E.</i>	Earlsfort <i>L.</i>	Clonmell <i>E.</i>
Bernard <i>V.</i>	Bandon <i>E.</i>	Eastnor <i>V.</i>	Somers <i>E.</i>
Berrisdale <i>L.</i>	Caithness <i>E.</i>	Ebrington <i>V.</i>	Fortescue <i>E.</i>
Bertie <i>L.</i>	Lindsey <i>E.</i>	Ednam <i>V.</i>	Dudley <i>E.</i>
Bingham <i>L.</i>	Lucan <i>E.</i>	Elcho <i>L.</i>	Wemyss & March <i>E.</i>
Binning <i>L.</i>	Haddington <i>E.</i>	Eliot <i>L.</i>	St. Germans <i>E.</i>
Blandford <i>M.</i>	Marlborough <i>D.</i>	Elmley <i>V.</i>	Beauchamp <i>E.</i>
Borlington <i>V.</i>	Morley <i>E.</i>	Emlyn <i>V.</i>	Cawdor <i>E.</i>
Bowmont <i>M.</i>	Roxburghe <i>D.</i>	Encombe <i>V.</i>	Eldon <i>E.</i>
Boyle <i>V.</i>	Shannon <i>E.</i>	Enfield <i>V.</i>	Strafford <i>E.</i>
Brabazon <i>L.</i>	Meath <i>E.</i>	Ennismore <i>V.</i>	Listowel <i>E.</i>
Brackley <i>V.</i>	Ellesmere <i>E.</i>	Erskine <i>L.</i>	Mar & Kellie <i>E.</i>
Brecknock <i>E.</i>	Camden <i>M.</i>	Eslington <i>L.</i>	Ravensworth <i>E.</i>
Brooke <i>L.</i>	Warwick <i>E.</i>	Euston <i>E.</i>	Grafton <i>D.</i>
Bruce <i>E.</i>	Ailesbury <i>M.</i>	Feilding <i>V.</i>	Dunbigh <i>E.</i>
Bruce <i>L.</i>	Elgin <i>E.</i>	Fincastle <i>V.</i>	Dunmore <i>E.</i>
Burford <i>E.</i>	St. Albans <i>D.</i>	Fitzharris <i>V.</i>	Malmesbury <i>E.</i>
Burghersh <i>L.</i>	Westmorland <i>E.</i>	Folkestone <i>V.</i>	Radnor <i>E.</i>
Burghley <i>L.</i>	Exeter <i>M.</i>	Forbes <i>V.</i>	Granard <i>E.</i>
Burke <i>V.</i>	Clanricarde <i>M.</i>	Fordwich <i>V.</i>	Cowper <i>E.</i>
Bury <i>V.</i>	Albemarle <i>E.</i>	Forth <i>V.</i>	Perth & Melfort <i>E.</i>
Camden <i>V.</i>	Gainsborough <i>E.</i>	Garlies <i>V.</i>	Galloway <i>E.</i>
Cantilupe <i>V.</i>	De La Warr <i>E.</i>	Garmoye <i>V.</i>	Cairns <i>E.</i>
Cardross <i>L.</i>	Buchan <i>E.</i>	Garnock <i>V.</i>	Lindsay <i>E.</i>
Carlow <i>V.</i>	Portarlington <i>E.</i>	Gifford <i>E.</i>	Tweeddale <i>M.</i>
Carlton <i>V.</i>	Wharnclyffe <i>E.</i>	Gilford <i>L.</i>	Clanwilliam <i>E.</i>
Carmarthen <i>M.</i>	Leeds <i>D.</i>	Glamis <i>L.</i>	Strathmore <i>E.</i>
Carnegie <i>E.</i>	Southesk <i>E.</i>	Glandine <i>V.</i>	Norbury <i>E.</i>
Cassilis <i>E.</i>	Ailsa <i>M.</i>	Glentworth <i>L.</i>	Limerick <i>E.</i>
Castle Cuffe <i>V.</i>	Desart <i>E.</i>	Glerawley <i>V.</i>	Annesley <i>E.</i>
Castlereagh <i>V.</i>	Londonderry <i>M.</i>	Graham <i>M.</i>	Montrose <i>D.</i>
Castlerosse <i>V.</i>	Kenmare <i>E.</i>	Granby <i>M.</i>	Rutland <i>D.</i>
Caulfield <i>V.</i>	Charlemont <i>E.</i>	Greenock <i>L.</i>	Cathcart <i>E.</i>
Chandos <i>M.</i>	Buckingham <i>D.</i>	Grey of Groby <i>L.</i>	Stamford & War-
Chelsea <i>V.</i>	Cadogan <i>E.</i>		ington <i>E.</i>
Chewton <i>V.</i>	Waldegrave <i>E.</i>	Grey de Wilton <i>V.</i>	Wilton <i>E.</i>
Clandeboyne <i>V.</i>	Dufferin <i>E.</i>	Grimston <i>V.</i>	Verulam <i>E.</i>
Clements <i>V.</i>	Leitrim <i>E.</i>	Grosvenor <i>E.</i>	Westminster <i>D.</i>
Clifton <i>L.</i>	Darnley <i>E.</i>	Guernsey <i>L.</i>	Aylesford <i>E.</i>
Clive <i>V.</i>	Powis <i>E.</i>	Haddo <i>L.</i>	Aberdeen <i>E.</i>
Clonmore <i>L.</i>	Wicklow <i>E.</i>	Hamilton <i>M.</i>	Abercorn <i>D.</i>
Cochrane <i>L.</i>	Dundonald <i>E.</i>	Hartington <i>M.</i>	Devonshire <i>D.</i>
Coke <i>V.</i>	Leicester <i>E.</i>	Hastings <i>L.</i>	Huntingdon <i>E.</i>
Cole <i>V.</i>	Enniskillen <i>E.</i>	Helmsey <i>V.</i>	Feversham <i>E.</i>
Compton <i>E.</i>	Northampton <i>M.</i>	Herbert <i>L.</i>	Pembroke & Mont-
Corry <i>V.</i>	Belmore <i>E.</i>		gomery <i>E.</i>
Courtenay <i>L.</i>	Devon <i>E.</i>	Hillsborough <i>E.</i>	Downshire <i>M.</i>
Cranborne <i>V.</i>	Salisbury <i>M.</i>	Hinchinbrook <i>V.</i>	Sandwich <i>E.</i>
Cranley <i>V.</i>	Onslow <i>E.</i>	Hinton <i>V.</i>	Poulett <i>E.</i>
Crichton <i>V.</i>	Erne <i>E.</i>	Hobart <i>L.</i>	Buckinghamshire <i>E.</i>
Cremorne <i>L.</i>	Dartrey <i>E.</i>	Holmesdale <i>V.</i>	Amherst <i>E.</i>
Crowhurst <i>V.</i>	Cottenham <i>E.</i>	Hope <i>L.</i>	Hopetoun <i>E.</i>
Carzon <i>V.</i>	Howe <i>E.</i>	Howard of Effingham <i>L.</i>	Effingham <i>E.</i>
Dalkeith <i>E.</i>	Buccleuch <i>D.</i>	Howick <i>V.</i>	Grey <i>E.</i>
Dalmeny <i>L.</i>	Rosebery <i>E.</i>	Huntingtower <i>L.</i>	Dysart <i>E.</i>
Dalrymple <i>V.</i>	Stair <i>E.</i>	Hyde <i>L.</i>	Clarendon <i>E.</i>
Dalzell <i>L.</i>	Carnwath <i>E.</i>	Ikerrin <i>V.</i>	Carrick <i>E.</i>
Dangan <i>V.</i>	Cowley <i>E.</i>	Ingestre <i>V.</i>	Shrewsbury & Tat-
Darlington <i>E.</i>	Cleveland <i>D.</i>		bot <i>E.</i>
Deerhurst <i>V.</i>	Coventry <i>E.</i>	Inverurie <i>L.</i>	Kintore <i>E.</i>
De Grey <i>E.</i>	Ripon <i>M.</i>	Jermyn <i>E.</i>	Bristol <i>M.</i>
Delvin <i>L.</i>	Westmeath <i>E.</i>	Jocelyn <i>V.</i>	Roden <i>E.</i>
Douglas <i>M.</i>	Hamilton <i>D.</i>	Kelburne <i>V.</i>	Glasgow <i>E.</i>
Doune <i>L.</i>	Moray <i>E.</i>	Kerry <i>E.</i>	Lansdowne <i>M.</i>
Douro <i>M.</i>	Wellington <i>D.</i>	Kilcourse <i>V.</i>	Cavan <i>E.</i>
Drumlanrig <i>V.</i>	Queensberry <i>M.</i>	Kildare <i>M.</i>	Leinster <i>D.</i>
Duncan <i>V.</i>	Camperdown <i>E.</i>	Killeen <i>L.</i>	Fingall <i>E.</i>
Duncannon <i>V.</i>	Bessborough <i>E.</i>	Kilmarnock <i>L.</i>	Errol <i>E.</i>
Dundas <i>L.</i>	Zetland <i>E.</i>	Kilworth <i>L.</i>	Mountcashel <i>E.</i>
Dungarvan <i>V.</i>	Cork & Orrery <i>E.</i>	Kingsborough <i>V.</i>	Kingston <i>E.</i>
Dunglas <i>L.</i>	Home <i>E.</i>	Kirkaldie <i>V.</i>	Leven & Melville <i>E.</i>
Dunlo <i>V.</i>	Clancarty <i>E.</i>	Kirkwall <i>V.</i>	Orkney <i>E.</i>
Dunluce <i>V.</i>	Antrim <i>E.</i>	Knebworth <i>V.</i>	Lytton <i>E.</i>
Dunwich <i>V.</i>	Stradbroke <i>E.</i>	Kynnaid <i>V.</i>	Newburgh <i>E.</i>
Dupplin <i>V.</i>	Kinnoull <i>E.</i>	Lambton <i>V.</i>	Durham <i>E.</i>

ascelles V. ... Harewood E.
aslie L. ... Rothes E.
aveson L. ... Granville E.
awes E. ... Abergavenny M.
ewisham V. ... Dartmouth E.
incoln E. ... Newcastle D.
indsay L. ... Crawford & Bal-
carres E.
oftus V. ... Ely M.
orne M. ... Argyll D.
oughborough L. ... Rosslyn E.
owther V. ... Lonsdale E.
umley V. ... Scarbrough E.
ymington V. ... Portsmouth E.
faduft V. ... Fife E.
lahon V. ... Stanhope E.
faidstone V. ... Winchelsea E.
faitland V. ... Lauderdale E.
falden V. ... Essex E.
landeville V. ... Manchester D.
farch E. ... Richmond D.
farsham V. ... Romney E.
fauchline L. ... Loudoun E.
felgund V. ... Minto E.
filton V. ... Fitzwilliam E.
folyneux V. ... Sefton E.
fontgomerie L. ... Eglintoun E.
foore V. ... Drogheda M.
foreton L. ... Ducie E.
forpeth V. ... Carlisle E.
fountcharles E. ... Conyngham M.
fulgrave E. ... Normanby M.
iaas L. ... Mayo E.
lewark V. ... Manvers E.
lewport V. ... Bradford E.
lewy & Morne V. ... Kilmorey E.
letown-Butler L. ... Lanesborough E.
lorreys L. ... Abingdon E.
lorth L. ... Guilford E.
lorthland V. ... Ranfurley E.
ckham V. ... Lovelace E.
gilvy L. ... Airlie E.
rmelie E. ... Breadalbane M.
assory E. ... Ormonde M.
xmantown L. ... Rosse E.
arker V. ... Macclesfield E.
elham L. ... Chichester E.
erceval V. ... Egmont E.
ercy E. ... Northumberland D.
etersham V. ... Harrington E.
evensey V. ... Sheffield E.
ollington V. ... Mexborough E.
orchester L. ... Carnarvon E.
roby L. ... Carysfort E.
lamsey L. ... Dalhousie E.
laynham V. ... Townshend M.
eldhaven V. ... Seafeld E.
locksavage E. ... Cholmondeley M.
toshill L. ... Northesk E.
toyston V. ... Hardwicke E.
tussborough V. ... Milltown E.
andon V. ... Harrowby E.
keltersdale L. ... Latham E.
ilchester L. ... Longford E.
omerton V. ... Normanton E.
t. Asaph V. ... Ashburnham E.
t. Cyres V. ... Idlesleigh E.
t. Lawrence V. ... Howth E.
t. Maur E. ... Somerset D.
tafford M. ... Sutherland D.
tanhope L. ... Chesterfield E.
tanley L. ... Derby E.
tavordale L. ... Ilchester E.
topford V. ... Courtown E.
tormont V. ... Mansfield E.
tuart V. ... Castle Stuart E.

Sudley V. ... Arran E.
Suirdale V. ... Donoughmore E.
Tamworth V. ... Ferrers E.
Tarbat V. (2nd son of Duke of Sutherland) ... Cromartie, Coun-
tess of.
Tavistock M. ... Bedford D.
Tewkesbury L. ... Munst r E.
Throwley P. ... Soudes E.
Titchfield M. ... Portland D.
Trafalgar V. ... Nelson E.
Tullibardine M. ... Athole D.
Turnour V. ... Winterton E.
Tyrone E. ... Waterford M.
Uffington V. ... Craven E.
Uxbridge E. ... Anglesey M.
Valletort V. ... Mount-Edgcombe E.
Vaughan L. ... Lisburne E.
Villiers V. ... Jersey E.
Walpole L. ... Orford E.
Weymouth V. ... Bath M.
Wiltshire E. ... Winchester M
Windsor E. ... Bute M.
Wodehouse L. ... Kimberley E.
Wolmer V. ... Selborne E.
Worcester M. ... Beaufort D.
Worsley L. ... Yarborough E.
Yarmouth E. ... Hertford M.

"Titmarsh, Timothy." See NOMS DE PLUME.
Tobacco Monopoly Bill, The German.

See GERMANY.
Todleben, Franz Edward, was a Russian general of renown, b. 1818. Early remarkable for his engineering skill, he soon rose to high rank, and to him was intrusted the fortification of Sebastopol in the Crimean war. He also planned the approaches to Plevna in the Russo-Turkish war, and for the success of his designs was created a Count. He died July 1st, 1884.

Togo-land. A German Protectorate on the Slave Coast (see WEST AFRICA), taken possession of by Dr. Nachtigal in July 1885, at the request of German traders settled there. Togo, Little Popo, Ague, and Great Popo, are four little territories lying between the Gold Coast colony and the Dahoman sea-board. Togo-land consists of a "beach," about twelve miles long, on which are the port-villages of Lomé, or Bé, Bagida, Porto Seguro, and Gum Koffi. Behind the beach is a lagoon, and then the "mainland," which extends inland about ten miles, lying round the Avon, or Hakkoo lagoon. The country is very populous, and is an outlet for considerable trade in palm oil and other produce. It is low, but fertile, growing pepper, indigo, cotton, and native fruits and vegetables. Togo, Gbomé, and Wo, are inland villages and markets. (Consult "Proceedings of the Royal Geographical Society," June 1885).

Tokio and its Seismological Society.

See EARTHQUAKES.

Tollemache, Mr. Henry James, M.P., of Dorfold Hall, nephew of Lord Tollemache; b. 1846, and educated at Eton and Christ Church, Oxford. He is a captain in the Earl of Chester's Yeomanry, and J.P. for Cheshire, of which county he was High Sheriff. Sat for West Cheshire in the Conservative interest (1880-85). Elected as member for Eddisbury Division, Cheshire (1885).

Tollemache, John Tollemache, 1st Baron (creat. 1876); b. 1805. Was M.P. for South Cheshire (1841-62), and for the Western division from the latter date till 1872.

Tomlinson, Mr. William Edward Murray, M.P., of Heysham House, Lancashire, was b

1838. Educated at Westminster and Ch. Ch., Oxford. Called to the bar at the Inner Temple (1865). Returned in the Conservative interest as member for Preston (1882-85); re-elected 1885.

Tonic Sol-fa Method. The original idea of the tonic sol-fa method of teaching music is due to **Miss Glover** of Norwich (daughter of a clergyman of the Church of England), who, about the year 1812, commenced a series of experiments in teaching children to read music. She did away with the complexities of the staff, using simply the names of the notes, and inculcated the great principle of key relationship. About the year 1840 the **Rev. John Curwen** (b. in Yorkshire, Nov. 14th, 1816, d. May 26th, 1880), a Nonconformist minister, who had been taking great pains to introduce a better style of singing into schools and congregations, became acquainted with Miss Glover's method, and learned to read music by its aid. He threw himself with great energy into the work of musical education by means of tonic sol-fa, devoting his life to its success. He greatly improved and developed the notation, and promulgated an admirable system of teaching in his valuable work "**The Standard Course of Lessons on the Tonic Sol-fa Method.**" The notational difference between the tonic sol-fa method and the staff consists in the former using the initial letters of the sol-fa names of the notes of the scale (doh, ray, me, fah, soh, lah, te), instead of notes placed on lines and spaces. Time is also marked in a very pictorial way. As a specimen, a part of "God save the Queen" is here given.

KEY A.

d	:	d	:	r	|	t ₁	:	—	:	d	:	r	|	m	:	m	:	f
God save our gracious Queen, Long live our																		
m	:	—	:	r	:	d	|	r	:	d	:	t ₁	|	d	:	—	—	etc.
noble Queen, God save the Queen.																		

The great educational and scientific principle of the method is **key relationship**—keeping the relations of the various notes of the scale to the tonic constantly in view. The relation of the various notes in the scale to the key note or tonic being the real foundation of harmony and melody, the system which makes this relationship the foundation of its teaching is certainly the most reasonable one. The best idea of the great progress which the system has made, will be formed from a statement of the position which it occupies at the present time (March 1886). The chief centre of the method is the **Tonic Sol-fa College**, situated at Forest Gate, and of which **Mr. John Spencer Curwen**, eldest son of the founder, is president. At this College classes are regularly held for the training of teachers of the method; "postal" classes for the study of various departments of musical science (such as Harmony, Composition, Counterpoint, Musical Form, Expression, Acoustics, etc.), are conducted, and a splendidly organised system of musical certificates carried on. A good evidence of the widespread ramifications of the system is found in the fact that last year the number of certificates issued amounted to over twenty-four thousand, sent to all parts of the United Kingdom and the Colonies. The method is recognised by Government equally with the staff notation, and it is used in a very large

majority of the public elementary schools. There is now scarcely a town or village in the kingdom in which there is not a Tonic Sol-fa choral society. Its publications cover the whole field of classical choral music. Its representative paper, **The Tonic Sol-fa Reporter**, has the largest circulation of any musical paper in Great Britain, and it has also a representative in the press of America (**The Tonic Sol-fa Advocate**), in which country it is steadily working its way.

Toole, Mr. James Lawrence, was b. 1820. Educated at City of London School. After being for some time in a mercantile office, he joined the City Histrionic Club, and made his first appearance on the stage at the Haymarket Theatre (1852). Engaged under Mr. Dillon at Queen's Theatre, Dublin, and met with great success. Played at Belfast, Edinburgh, and Glasgow, and (1854) was engaged at St. James' Theatre, London, where he played in various characters of low comedy. Engaged afterwards at the Lyceum; and on the opening of New Adelphi Theatre became principal comedian. Makes a professional tour in the provinces every year, and visited the United States, America (1874), where he appeared at Wallsett's Theatre, New York. On his return to England appeared at Gaiety Theatre (1875). At close of 1880 he commenced the management of the Folly Theatre, which he has had reconstructed and named after himself, "**Toole's Theatre.**" His acting is distinguished by its faithful attachment to nature in all the parts he assumes.

Tories. See **POLITICAL PARTIES (ENGLISH).**

Torpedo Boats and Torpedoes. See **NAVY, BRITISH.**

Torpedo Catcher and Netting. See **NAVY, BRITISH.**

Torrefied Barley. White malt or torrefied barley is the invention of **Mr. John Ford**, of Tottenham, a technical chemist, who has devoted much attention to the industry of brewing. By his process of cooking or torrefaction the starch cells of the grain are practically all ruptured and its rawness thereby destroyed. The machine used in the process consists of a horizontal revolving cylinder, surrounded by a casing of metal or some non-conducting material. Underneath the entire length of this cylinder is fixed a specially constructed gas burner, which supplies a smokeless flame, with great heating power. The time which the grain takes in passing through the machine does not exceed two minutes. The heat to which it is subjected, combined with its natural moisture, completely bursts the starch cells, which in their turn burst the husks, so that each corn becomes swollen and considerably enlarged. Besides rupturing the starch cells this method of torrefaction considerably modifies the albuminous constituents of the grain, and by coagulating them renders them partially insoluble, and thus prevents their solution in the mash-tun. The torrefying process imparts to the grain that empyreumatic flavour and smell which is characteristic of well made malt. "**White Malt**" is, from the nature of the process by which it is prepared, entirely free from these fungoid organisms and their germs, which usually cause so much trouble in the manufacture of beer. Amongst the advantages claimed for this process is that low-class barleys can be made to furnish a brewed material quite equal to the malt from fine

lass malting barleys. Wheat, rice, buckwheat, dani and maize have also been successfully treated; the last named, which often causes injurious effects on animals when fed with it in the raw state, is rendered quite digestible by torrefaction. It is believed that Dr. Fordred's invention will become of great benefit to farmers.

Torrington, George Stanley Bing, 8th Visct. (creat. 1721); b. 1841; succeeded his uncle 884. Served in Indian Mutiny and in Zulu campaign. The 1st peer was the celebrated admiral George Byng.

Tottenham, Mr. Arthur Loftus, M.P., was b. 1838. Educated at Eton. Served in the Rifle Brigade, from which he retired (1861). Was a J.P. for the counties of Cavan, Fermanagh, and Leitrim, of which latter he is Deputy Lieutenant and High Sheriff (1866). Returned in the Conservative interest as member for co. Leitrim (1880-85), Winchester (1885).

"Touchstone." See NOMS DE PLUME.

Tourgal Region. See KIRGHIZ.

Tours. See FRANCE.

Townshend, John Villiers Stuart Townshend, 5th Marq. (creat. 1786); b. 1831; succeeded his father 1863. Was M.P. for Tamworth (June 1856 to August 1863).

Tractarian Movement The, was the commencement of the Catholic revival in the Church of England, whose latest development is termed the Ritualism of the present day. At that time there were two influences then in operation over England, both of which alike raised the alarm and hostility of certain gifted and enthusiastic young Oxford men. One was the tendency to Rationalism, drawn from the German theologians, and the other was the manner in which the connection of the Church with the state in England was beginning to operate to the disadvantage of the Church as a sacred institution and teacher; and out of the contemplation of these dangers sprang the desire to revive the authority of the Church, and to make her once again the national Church in the widest and deepest sense of the term. John Henry (now Cardinal) Newman (*q.v.*), who had up to his time been distinguished as one of the most inspiring enemies of Rome, first started the project of publishing the "**Tracts for the Times**," and of these he wrote the most remarkable. He was the author of the celebrated *Tract 90*, which was censured by the University authorities on the ground that the principle it seemed to put forward was that a man might honestly subscribe all the articles and formularies of the English Church whilst holding many of the doctrines of the Church of Rome. In March 1841 a meeting of the Vice-Chancellor and the heads of houses at Oxford took place, when it was resolved "That modes of interpretation such as are suggested in the same tract, evading rather than explaining the sense of the Thirty-nine Articles, and reconciling subscription to them with the adoption of errors which they were designed to counteract, defeat the object and are inconsistent with the due observance of the statutes of the University." The following day Dr. Newman addressed a letter to the Vice-Chancellor, acknowledging himself to be the author of *Tract 90*, and stating that his opinion remained unchanged of the truth and honesty of the principle therein maintained, and of the necessity of putting it forth. Two years later, in October 1843, Dr. Newman, in writing to a friend announced his resignation of

St. Mary's, Oxford, where he had exercised great influence as a preacher, after remarking on the difficulty of giving any just view of his feelings, and reasons for the step he had taken, said: "The nearest approach I can give to a general account of them, is to say that it has been caused by the general repudiation of the view contained in No. 90 on the part of the Church." In September 1845 Cardinal Newman was received into the Roman Catholic Church, and his secession was described by the late Lord Beaconsfield (then Mr. Disraeli), a quarter of a century afterwards, as having "dealt a blow to the Church of England, under which she still reels." Amongst others who took part in the movement were "the sweet and saintly" Keble, who claimed for the Church of England that she was the real Catholic Church, and that Rome had wandered away from the right path, and foregone the glorious mission which she might have maintained; and he remained in the Church of England until his death. Another contributor to "**Tracts for the Times**" was Richard Hurrell Froude, the historian's elder brother, who died while still in comparative youth. Dr. Pusey was associated with the movement, and he remained in the Church of England until his death, and although never what is now termed a ritualist, was the leader of the school which formerly bore his name—the Puseyite, or High Church party—from which the more extreme Catholic section in the Church of England has developed. The object of the movement was to rouse the Church of England from the prevailing apathy of the time, and to infuse into the bishops and clergy a higher and deeper sense of her mission; and among its varied and memorable results have been the renewed life and vigour of the Church, and the great improvement in the performance and style of her services that have taken place during the last forty years.

Tracts for the Times. See TRACTARIAN MOVEMENT.

Trade of 1885, The No thoughtful observer of the state of commerce in the United Kingdom during the year 1885 can profess to regard it with anything but profound dissatisfaction. In addition to the extreme depression of trade existing all over the world, there have been many special causes tending still further to depress British commerce. The threatened war with Russia (April 1885), although it put a good deal of money into the hands of a few ship-owners, who supplied the transports and armed cruisers chartered by the Government, did nothing but mischief to the general interests of business, for it produced an unsettled feeling fatal to any large operations, except such as were absolutely necessary in the usual routine of trade, or others which were of a purely speculative character. The change of Government in June last did much to revive business on the Stock Exchange; but the result of the general election in November neutralised much of the advantage thus gained. Throughout the Eastern markets the silver question (see BIMETALLISM) is producing untold mischief. Sooner or later it will have to be faced by this country, as it is being faced by the United States. In one of our colonies, Singapore, things have come to such a pass that, although the Straits Settlements are British possessions, and the standard of value is the dollar, it is necessary to send all the way to Mexico to procure coins, which are inartistic, badly finished, of uncertain intrinsic

value, and easily counterfeited. It is remarkable that these Mexican dollars have been sold in London for months past at a large premium—sometimes as high as 4½ per cent.—over their metallic value; but the difficulties of the Straits Settlements in this respect are only cited as an example of what is going on all over the East. The outbreak of hostilities between France and China did much to cripple our Chinese trade; while at home, although the volume of trade has been larger than ever, profits have steadily diminished. The working classes and their employers, having less money to spend, were compelled to restrict their expenditure, with the result that several trades, notably the building trade, were brought almost to a standstill. Foreign competition helped to paralyse this and other businesses; for while a large number of British carpenters and people engaged in the furniture trade were unemployed, window-sashes, doors, and other materials of the same kind, were being poured into the English market free of all duty. The paralysis in the building trade was so complete that the North Wales quarry owners, in the closing weeks of the year, locked out thousands of men for the actual, if not the avowed reason that they had slates sufficient on hand with which to supply the market for nine months to come. Without stopping here to discuss the Board of Trade returns for the year, we may sketch, in brief, the condition of some of the chief industries of the country at the end of 1885. Shipbuilding is an industry of vast importance, for upon it the iron-master and the coal-owner in a large measure depend. This trade was extremely depressed throughout 1885. There was an immense rush of small capitalists into shipping during the year 1883. Those who wish to know why this was so would do well to consult Mr. Thomas May's evidence before the Royal Commission on Loss of Life at Sea (*vide* "First Report," pp. 46-8). The result was an enormous product of unnecessary tonnage, and a competition among owners of cargo boats which was so keen that hundreds of steamers had to be laid up or to be run at a loss. Capital could no longer be attracted to shipping, and the effect was an immediate depression in shipbuilding. In 1883 the output on the Clyde was 419,664 tons; in 1884 it was only 296,854 tons; while last year it had dropped so low as 193,458, and this although shipbuilders were willing to build first-class steel vessels at about 69 10s. a ton, just to keep their yards going. Every effort was, indeed, made to attract speculators. The growing use of steel was one of the most striking of the great revolutions made in the trade. In 1879 the steel tonnage built was only 18,000; in 1884 it was 133,670; and last year it was 92,677, out of a total tonnage produced of 193,458 tons. Another great improvement shipbuilders tempted capitalists with was the triple expansion engine, which is expected to save from 15 to 20 per cent. of fuel, to secure in general a more economic working of boats, and, of course, to enable ships to carry larger cargoes. In spite of low prices and high-class work, capitalists could not be tempted to build, unless for old-established lines with a regular trade. This, and the collapse of speculation in American railroad construction, produced severe depression in the iron and steel trades. There was an improvement at the close of the year: Cumberland hæmatites, for instance, advanced early

in December 2s. 6d. to 3s. 6d. per ton from the lowest point. Much of this advance was, however, speculative—particularly in the case of Scotch pig warrants. Sales to the United States are largely for forward delivery, and there was a good deal of speculation for the rise in this market in Middlesbrough, which did not at the time make itself perceptible in the Board of Trade returns. It is expected that from 4,000 to 5,000 miles of new railroads will be constructed in 1886 in the United States. The Americans could probably sell about 2,000,000 tons of steel rails themselves in case of need; and as the difference in price between British and American rails is from eight to ten dollars, no very large orders can be expected just yet in this country. An activity in the rail trade would tell on the price of Bessemer pigs, where Great Britain can compete with the United States. The price in America is from 19½ to 20 dollars, and Cumberland hæmatites can be laid down at this rate in New York, Philadelphia, and Boston. The trade with India and the colonies was well sustained during 1885. During the first eleven months of the year we sent to India 271,011 tons, against 145,534 tons in the same period in 1884. The trade to Germany has been bad partly because the Germans are making strenuous efforts in this field of commerce themselves and partly because they, like ourselves, are passing through a period of severe depression. It is significant, however, in considering the position of trade as a whole at the end of 1885, that while manufactured iron, such as rails, bars, hoops, and sheets, were in slow demand and the prices were low, raw materials, such as coal and pig-iron, were firm—a circumstance which strengthens our opinion that much of the apparent better feeling prevalent was due to speculation. As the iron and steel trades suffer when shipbuilding is dull, so the coal trade is depressed when the freight market is disorganised, as it was last year.—The textile trades did a very large business during the past year, but as every cotton spinner in Lancashire believes that he is losing at this moment, about a halfpenny in every pound of manufactured cotton he sends out of his mill, it may seem strange that people should be willing to work at a loss; but it is an all important object to keep together one's connection in the hope that better times may come. Large as the exports of yarns and textiles were in 1885, it apparently shows a serious falling off as compared with the previous year (1884). The value of the exports last year was £101,871,483, which was £7,992,933 less than 1884; but this difference was purely the result of a falling market. Manchester is not importing so much cotton as usual from the United States and India, and the Board of Trade returns show a serious decline in the imports of flax, hemp and jute. As regards the manufacture, which may be regarded as a branch of the manufacture of flax, there were only five factories in this country in 1862. Last year there were 107, employing close upon 20,000 persons. The flax trade, like every other in the country, was greatly depressed during the year 1885; and in December there were a number of serious failures in the trade, of which Dundee is the centre. Both flax and the jute trades would have experienced a great advance in prices had there been war with Russia. As regards flax, prices

would probably have gone up in the coarse end of the trade, but in fine goods it would perhaps have made no difference. Russia supplies us with coarse flax, and a conflict between the two countries would not have affected the medium and fine trade to any appreciable extent, for Russia is not a linen manufacturer. The rise would not in any case have been very considerable. The Russians could not afford to hold the produce in their country; they would have forwarded it overland through some of the German ports. This would have caused an increase to the extent of the amount paid for carriage; but any further attempt to raise prices would have been checked by the corresponding depreciation in exchanges, which would certainly have followed war. As war did not break out, the market was chiefly affected by the anxiety of the Russians to sell. The Exchanges were consequently depressed, and the same result occurred with respect both to bristles and hemp. Jute has been much below the average price throughout the year. On its merits, apart from war, it ought to have advanced in price in April last, particularly as the usual rumours about want of rain were plentiful. The hopes then entertained were never fulfilled, and the close of the year proved to be an exceedingly gloomy time for Dundee. Throughout the dull times the country has recently experienced, it is the employers, and not the employed, who have been compelled to bear the burden of falling markets and diminishing profits. This is shown by the fact that, according to the last quarterly statement, made up to Michaelmas 1885, the increase of pauperism in England and Wales was very slight, as the following figures will show:—

1883	684,599.
1884	685,445.
1885	688,031.

If, again, we take particular sections of the country where manufacturing industries are the most abundant, the conclusion we arrive at is the same—namely, that pauperism has not increased to any appreciable extent, as compared with the falling off in the incomes of the middle and upper classes. In the Midland, North Western and York divisions of the kingdom, the figures for the three years were 181,362, 183,020, and 187,923 respectively. In the Northern division, embracing the counties of Durham, Northumberland, Cumberland, and Westmoreland, the figures were 35,943, 39,638, and 39,478 in these respective years, so that there was less pauperism in 1885 than in 1884. It is an extremely difficult thing at all times to reduce wages in an old country like England. This was forcibly illustrated by the **Oldham Strike**, which terminated in a compromise last October. When the "list" of prices was estimated, in 1876, the necessities of life were cheaper than they are now by at least a fourth. Fifteen shillings will purchase as much goods now as a sovereign would then; and the spinners argued that as the operatives were but 25 per cent. better off, a reduction of 10 per cent. could not greatly injure them. Our goods have to be exchanged for the products of foreign countries, which have depreciated three or four more times in value than English yarns; and this was only one of the elements of difficulty English cotton spinners had to contend against. After a fierce and prolonged resistance—so fierce that Lancashire

manufacturers have been unable to pluck up courage to follow in the footsteps of the spinners, an arrangement was arrived at. The Operatives committee offered to accept an unconditional reduction of 5 per cent., and to submit to a further reduction of the same amount three months later. The masters asked that the second reduction should be made on the state of the market the day the arrangement was effected. Ultimately this was accepted, after a strike, which nevertheless did but little to relieve the congested market. The trade is depressed because our manufactures have to be exchanged for raw material from abroad. The cost of a piece of calico mainly consists in the labour required to produce it, and as the value of the articles taken in exchange has fallen very considerably, those who produce them have to give so much more for a sovereign than was the case two years ago. The result is that they can only continue to trade with us by making us give them so much more cotton goods than we did two years since, this being shown by the fact that they can be purchased far more cheaply now in the bazaars of India and China than they ever could before. Foreign and Indian competition has also done much to depress the trade of Lancashire. In 1884 there was in India a special cause militating against the sale of cotton goods. There was a concurrence of opinion that the year was an unlucky one for marriages; but it remains to be seen whether business has improved in consequence of the greater number of weddings that took place in 1885. It almost appears as if the time were not far distant when India will be able to supply its own wants in this trade. The cloths of the Indian mills are finding a wider outlet in the country year by year, as the extension of railways enables them to be laid down at cheaper rates; and imported cottons have it is feared, no very brilliant future in the Indian market. In proof of this take the following figures:—

	1885.	1884.	1883.
No. of Mills	81	74	—
No. of Spindles	2,047,901	1,896,804	1,654,106
No. of Looms	18,433	16,251	15,116
Average No. of persons employed daily	63,163	61,536	53,624

In the last quarter of the year a very old grievance cropped up anew: the Bengal Chamber of Commerce drew the attention of the Manchester Chamber to grave irregularities in the stamping of piece goods shipped from Lancashire. An instance was given where ten pieces taken from a bale of shirtings of sixty pieces, all stamped 38 to 38½ yards, only measured out as follows:—36 yards 10 inches, 36 yards 12 inches, 36 yards 32 inches, 37 yards 19 inches, 36 yards 23½ inches, 35 yards 2 inches, 37 yards 14 inches, 36 yards 16 inches, 36 yards 28 inches, and 36 yards 13 inches. With all these causes at work, it is not surprising that trade at home should be dull; but the operatives at the close of the year were as unwilling as they were at its commencement, to accept reductions of

wages. At the end of December there were resistance in the ship-building trade at Sunderland, in the **Iron** trade in Staffordshire, in the **Steel** trade, (see **IRON AND STEEL**), owing to a reduction of fifteen shillings a ton on steel ship plates made by the Scotch makers, in the slate trade of North Wales, and in the Yorkshire coal trade. The question of the relative cost of English and foreign labour is among one of the many serious points that ought to be considered by the Royal Commission on Dull Trade now sitting. After thus glancing at the more important industries of the country and their condition during 1885, we shall conclude by summarising the exact position of affairs as shown by the **Board of Trade Returns**. The imports amounted to £373,834,000, or £15,490,000 less than in 1884—a little over 4 per cent.; and here we may repeat the caution we have already given, that a shrinkage in value does not necessarily mean a falling off in the bulk of our trade. It signifies that we are doing more work for the same or less money. The chief falling off is in raw cotton, which accounts for more than a half of the whole difference. The year's imports of **wheat** were 61,453,000 cwt., valued at £24,066,000, as against £47,113,000 cwt., valued at £19,825,000 in 1884. We exported **home produce** to the extent of £213,031,000, which is a decrease of £19,994,000, or 8½ per cent., compared to the previous year. If the re-exports be added, the total is £270,935,000, and a comparative gross decrease of £25,003,000, or something under 8½ per cent., the bulk of the falling off being in the textile and metal trades. Among the latter **copper** and **tin**, have been both imported to a smaller extent, the copper market having been in a state of congestion for months past. **Russia** and **India** have increased their shipments of **wheat** for this market much more than the United States, while Egypt sent us none at all. Altogether the value of our imports of articles of **food** and **drink** amounted in 1885 to £149,106,000, which was nearly as much as in 1884. The decline in our exports of **machinery** amounts to 21½ per cent., and to 11½ per cent. in **iron** and **steel**. This latter result is partly due to the fact that the **Germans** are fast emancipating themselves from the need for British iron, as a good deal of British (chiefly Scotch) pig-iron is still used to mix with the home metal for castings and similar work, but it is being gradually displaced by German grey pig, the quality of which is said to have steadily improved.

Trades Union is a protective society of workmen formed for combined action in furthering their interests in matters relating to wages, hours of labour, and conditions of employment. Besides these objects, a trades union may include mutual relief within the scope of its operations. The mediæval guilds were in a sense trades unions, and during the last few centuries combinations of workmen for raising wages have often appeared, but they were always subjected to severe penalties. At the end of the last century the introduction of machinery stimulated workmen to form these combinations, and before the beginning of this century the wool combers, cotton spinners, weavers, calico printers, and scissors grinders, all had their unions. In 1799 and 1800 laws prohibiting these combinations were made, but were systematically evaded. In 1824 a committee of the House of Commons reported that out-

lawry had made the unions lawless. An Act was then passed making combinations of workmen legal for two objects—(1) "improving wages," and (2) "reducing the hours of labour." The workmen objected (1) that this statute ruled that in all disputes the word of the master must be taken in preference to that of the servant, (2) that the judges nullified the Act by ruling that "all combinations in restraint of trade" were criminal; and, in the famous case of *Hornby v. Close* (1867), that organised trades unions could not hold property or funds even for benevolent purposes. The **Conference of Trades Union Delegates** in St. Martin's Hall on March 5th, 1867, held to protest against this decision, was the germ out of which the **Trades Union Congress** grew. They complained that whereas members of masters' associations were free to send circulars to each other urging the dismissal of "marked" unionists, workmen were prohibited from "picketing," or endeavouring to dissuade each other from serving an employer whose hands had struck. They complained that by straining the law of conspiracy an act on the part of an individual which was legal was held to be criminal when done by a combination of individuals. They held it was unjust to fine a master, when his servant was not fined but imprisoned for breach of contract. In 1871 an Act was passed remedying these defects, but its ambiguity gave scope, notably in the well-known case of the imprisoned gas stokers, to cruel miscarriages of justice. Previous to 1876, unionism under the ban of the law had enforced its authority in Sheffield by a series of hideous outrages—which, however, were execrated not only by the public, but by the working classes themselves. In these crimes twelve out of sixty existing unions in the town were implicated. This it was that led to the appointment of the Commission of 1867, and the **Act of 1871**, which legalised unions, and prevented their members from being prosecuted for conspiracy. It also led to the liberal interpretation of **Russell Gurney's Act of 1868**, which gave protection to their funds. As to the object of trades unions, the view of **Mr. W. T. Thornton**, which is that their sole aim is to raise wages and "dictate arbitrarily the conditions of employment," is repudiated by leading unionists. They hold that the object of a trades union is to ameliorate the lot of labour in the highest and broadest sense conceivable. **Mr. Joseph Costrick** holds that the true object of a trades union is not to get the highest possible wage, but "to render the working man's employment less precarious." The broader view of the function of a trades union is certainly more consistent with known facts as to its organisation. Some of the unions, for example, do part of the work of the state bureaux of labour—keeping in large towns a "vacant-book," recording the names of men who want work and of masters who want workmen; and they also issue reports on the state of trade and the labour market in various centres of industry. The unions enforce, with varying stringency, certain qualifications for membership—health, skill, character, and regular apprenticeship. The minimum of age for a full member is 22 years—the maximum from 40 to 50. Unions frown upon long engagements at fixed rates of wages; they oppose overtime; they refuse to let their members work with non-unionists; they try to fix in all towns a minimum rate of

wages; they not only insist on apprenticeship, but restrict the number of apprentices engaged, and on the plea that it is the workman and not the master who teaches the apprentice. As a rule they object to piecework, but notably so in the engineering and building trades. In the mining trade they have at times demanded a check on production, so as to prevent prices falling so low as to justify a reduction in wages. Whether unions have or have not raised wages is still a moot point among economists. Some deny they have. Others admit they have, but that any rise in the wage of the producer is neutralised by the enhanced prices which, as a consumer, he is thereby compelled to pay. Mr. W. T. Thornton argues that unions have raised wages to such an extent that £9,000,000 a year have been added by them to the earnings of the working class. Mr. R. Giffen, in his recent discussion of the history of the wage rate, contends that the condition of the working class has much improved since the corn laws were repealed. It is curious that for his proofs he relies on statistics of wages, showing their increase for the most part only in trades which are protected by unions. One great object of the trades unions is to organise a "strike" against an employer who refuses an increase of wages when demanded, and the retaliatory measure of the master is technically termed a "lock-out." In the one case the men refuse to work at all, and live on the funds of the union till the strife is composed; in the other the masters will not let them work till they have been starved into submission. Strikes, however, are recognised as being in industry what war is in international policy; and the officials of the unions usually discourage them. In 1874 the Trades Union Congress passed a resolution to the effect that "in all trades where disputes occur, and where it is possible to prevent strikes by starting co-operative establishments, all trade societies and trades councils be recommended to render such assistance as lies in their power, and thus, as far as possible, prevent strikes and lock-outs in the future." During the six years of bad trade ending 1883, seven of the great trades unions

out of a capital of £2,000,000 spent on strikes only £162,000. In 1882 it seems that 99 per cent. of the expenditure of these unions was for benevolent purposes, and only 1 per cent. for strikes. In 1876 Mr. George Howell, M.P., estimated the number of trades unionists in the country to be 1,600,000; but in the latest edition of the essay on "Trades Unions," which won the prize offered by the Trades Union Congress in 1873, Mr. Trant sets the number down at 800,000. Owing to a general growth in this idea that strikes could be best avoided by submitting disputes to arbitration, a Board of Arbitration was established in 1860 at the request of the lace workers in Nottingham, and since then similar boards have been formed by the trades in Staffordshire, Middlesbrough, Cleveland, Bradford, Sheffield, and other places. The great triumphs of unionism have been three in number—(1) the **Repeal of the Criminal Law Amendment Act** by (the now) Sir R. Cross in 1869; (2) the passing of the **Compensation Bill**, for injuries due to negligence on the part of their employer or his servants; and (3) the return to parliament in 1885 of **twelve working men representatives** as avowed representatives of unionism. The unsuccessful strike of the engineers in 1851 led to a migration that established unionism in **Australia**. To some extent it exists in **New Zealand** and other colonies. In **Canada** there is an association known as the "**Canada Labour Union**," but practically there are no true trades unions of colonial extent in Canada, save those which are really branches of the trades unions in the United States. According to the **last report of the Registrar-General of Friendly Societies**, issued in December 1885, which gives the returns relating to trades unions for the previous year, the number of members decreased from 253,088 to 249,653, compared with the returns for 1883. Notwithstanding this, there was a large increase both in invested funds and in income. The former increased from £431,295 to £529,587, and the latter from £202,720 to £358,286. The following table gives the statistics of the leading trades unions, according to the last return, in their order of importance:—

	Funds.	Income.	Members.
	£	£	
United Society of Boiler Makers and Iron Shipbuilders	108,545	72,946	29,546
Amalgamated Society of Carpenters and Joiners	61,617	54,639	22,839
Amalgamated Soc. of Operative Cotton Spinners, and Self-Actor Minders and Twiners of Lancashire and adjoining Counties	37,044	34,288	14,326
Amalgamated Society of Railway Servants of England, Ireland, Scotland, and Wales	36,932	13,933	8,077
Durham Miners Association	34,709	34,558	36,000
Northumberland Miners Mutual Confident Association	33,318	6,636	10,900
Amalgamated Society of Operative Lace Makers	29,475	10,791	4,020
Operative Bricklayers Society	28,949	9,095	6,075
Amalgamated Society of Tailors	18,791	19,630	14,203
West Yorkshire Miners Association	12,936	11,016	12,000
London Society of Compositors	12,415	10,129	5,850
Steam Engine Makers Society	11,141	9,870	4,762
Kent and Sussex Labourers Union	10,686	11,863	12,000 to
North Wales Quarrymen Union	10,250	1,282	14,000
National Agricultural Labourers Union	6,964	6,931	3,535 15,000

Trade Winds. See METEOROLOGY.
"Trafford, F. G." See NOMS DE PLUME.
Transcaspien. See CENTRAL ASIA.
Transkeian Territories. See KAFFRARIA.

Transubstantiation. See REAL PRESENCE.
Transvaal. An independent Dutch state, officially styled the South African Republic. It lies N. of the Vaal river and S. of the Lim.

popo river. It is bounded W. by Bechuanaland; E. by Portuguese territory; S. by Zululand, Natal, and Orange Free State. Area 110,193 sq. miles; pop. about 800,000, of whom some 50,000 only are whites. The country is generally elevated, in some parts very rugged. The **Hooge Veldt**, a lofty plateau extending along the S. and S.E., is the principal seat of industry. **Boesch Veldt**, or forest country, is found chiefly in the N.E. The climate is extremely fine, in spite of the almost tropical latitude; the elevation rendering it healthy and agreeable. The Transvaal is rich in minerals: there are immense fields of coal, with surface outcrops. Gold has been found in good paying quantities, both alluvial and in quartz, in the eastern districts, and is now worked (see **SOUTH AFRICAN GOLD FIELDS**). Lead, silver, copper, iron, and cobalt, are also found in considerable quantities, and tin, platinum, and plumbago have been discovered. The capital and seat of government is **Pretoria**, and the country is divided into thirteen districts. The other principal towns are Potchefstroom, Leydenberg, Wesselström, and Heidelberg. The mountains of the Transvaal are very fine; the principal ranges being the Drakensberg, the Libomba, the Zoutpansberg, and the Waterberg, etc. From 1836 began the "trekking" of Dutch Boers out of **Cape Colony** (q.v.). After the annexation of Natal and of the Orange River State many settled beyond the Vaal, but on account of their ill-treatment of the coloured races the British Government had again and again to interfere. On the 17th January, 1852, the **Sand River Convention** was signed, which recognised the Transvaal as an independent state, though with certain restrictions concerning the native tribes, which the Boers subsequently chose to ignore. In 1858, the three original commonwealths in the country united to form a republic and in 1873 elected the **Rev. T. Burgers** their President. He conceived the idea of a railway to **Delagoa Bay**, and essayed to promote its construction (see **DELAGOA BAY**). But native troubles arose: **Sikukuni**, a Bechuana chief, inflicted crushing defeats on the Boer forces, and threatened the capital. Other and more powerful tribes became excited in turn against the Boers, who had seized their lands, burnt their kraals, and enslaved their children. It became necessary for **Great Britain** to interfere, and on April 12th, 1877, the Transvaal was annexed. For a time English money and English enterprise worked wonders: markets were created for the produce, and land rose in value to an unlooked-for extent. In December 1880, however, a majority of the Boers took up arms against the British Government. They invested the towns held by Imperial troops, and surprised a detachment on the march. **Sir G. P. Colley** hastened from Natal with such troops as he could collect. He was defeated by the Boers at **Laining's Nek**, and shortly afterwards at **Majuba Hill**, where he himself was killed. Reinforcements were now sent up under **Sir Evelyn Wood**, and there is little doubt the rising would soon have been quelled. But meanwhile the Gladstone Cabinet at home, which had previously declared that the policy of its predecessors in annexing the Transvaal could not be retired from, suddenly changed its attitude, partly owing to representations made to it by **President Brand** of the Orange Free State. Gen. Wood was ordered to confer with the Boer leaders (**Joubert** and **Kruger**); and a

treaty, more liberally renewed in 1884, was made, by which the Transvaal became again independent. The results of this "act of magnanimity" have not been happy. The Boers imagined themselves to have conquered the British, and behaved accordingly. Property of British and loyal residents became valueless, and the stipulations of the convention were ignored. Aggressions into Bechuanaland (which see) have obliged interference, and aggressions in Zululand are at present awaiting settlement. The Transvaal is ruled by a President (**Mr. Kruger**), elected for five years, with a Council of four members. Legislation is effected by a Volksraad of forty-four members, one-half retiring every two years. To exercise the franchise, burghers must reside five years, take the oath, and pay £25. There is no standing army, and no force to maintain order or enforce collection of taxes, but every burgher may be called out in time of war. The Transvaal has a debt of about £300,000. Its estimated revenue is about £312,000, and its expenditure considerably more. The State is, however, practically bankrupt. The Dutch Reformed Church is the dominant religion (see **BOERS**). (Consult Aylward's "Dutch South Africa," Clark's "Transvaal and Bechuanaland," Norris-Newman's "With the Boers," Jeppe's "Transvaal Book and Almanack" [Pretoria, annually], etc.)

Transylvania. See **AUSTRO-HUNGARY**.

Trant, Mr. See **TRADES UNION**.

Traveller, Bonâ-fide. By section 10 of the Licensing Act, 1874, licensed retailers of intoxicating liquors to be consumed on the premises may at any hour of the day or night sell such liquor to *bonâ-fide* travellers. No person is to be deemed a *bonâ-fide* traveller unless the place where he lodged during the preceding night is at least three miles distant from the place where he demands to be supplied with liquor, such distance to be calculated by the nearest public thoroughfare. Any person falsely professing to be a *bonâ-fide* traveller renders himself liable to a penalty not exceeding £5. But a licensed retailer who has acted in good faith, and has taken all reasonable precautions to ascertain whether his customer was or was not a *bonâ-fide* traveller, is not answerable for any mistake which he may commit.

Treasure Trove. A hoard of the precious metals in any form hidden in the earth, or in any private place, and found (its owner remaining unknown) is treasure trove. Treasure so found belongs to the sovereign subject only to the rights of the owner, should he be afterwards discovered. The right to treasure trove has however been sometimes conferred by the Crown upon the lord of the manor. When paper money was unknown and property insecure, the practice of hiding gold and silver was very common, and the right to treasure trove proportionably valuable. At one time the secreting of treasure trove was a capital offence.

Treasury. See **CIVIL SERVICE**.

Treaty of London, March 13th, 1871. See **BLACK SEA CONFERENCE**.

Tredegar, Godfrey Charles Robinson-Morgan, and Baron (creat. 1859); was b. 1830; succeeded his father 1875. Served the Eastern campaign of 1854-5 was M.P. for Brecknockshire (Dec. 1858 to April 1875).

Trench, Richard Chenevix, D.D., was b.

1807. Educated at Trin. Coll., Cambridge, where he graduated. Ordained deacon (1829), and became, after holding a curacy at Hadleigh, incumbent of Curdridge, which he resigned (1841) to become curate to Archdeacon (afterwards Bishop) Wilberforce at Alverstoke. Presented to the rectory of Itchen Stoke (1845); Hulsean Lecturer at Cambridge (1845-46), and one of the select preachers; Examining Chaplain to Bishop Wilberforce, and shortly after professor of Theology and Examiner at King's Coll., London. Dean of Westminster (1856); Archbishop of Dublin (1863), resigning this office (1884). On the Disestablishment of the Irish Church, which Archbishop Trench vigorously opposed, he devoted himself energetically to its reorganisation; universal regret being expressed at his retirement from the See. Dr. Trench was the author of many valuable works: amongst them may be mentioned his earliest work "Justin Martyr" (1835), "Notes on the Parables of our Lord" (1841), followed soon after by "Poems from Eastern Sources," Hulsean Lectures for 1845-46, "Study of Words" (1851), "Synonyms of the New Testament" (1854), "English Past and Present" (1855), "Five Sermons on Christ" (1858), etc. He was also one of the editors of the "Speaker's Commentary," and chairman of the Literary and Historical Committee, intrusted, in conjunction with an Etymological Committee, by the Philosophical Society with the preparation of a new English dictionary. Dr. Trench married his cousin, the Hon. Frances M. Trench, sister of Lord Ashtown. He died in London March 28th, and was interred in Westminster Abbey April 2nd, 1886.

Trepaning (pronounced "trephining"). A surgical operation rarely resorted to, except in extreme cases. The object of the operation is to relieve pressure on the brain caused by fracture of the skull, or accumulation of the blood induced by accident, by excising a small portion of the bone. The extraneous weight is thus removed, and a small plate of silver fitted over the hole caused by the extraction of the piece of the skull. The patient is generally insensible from the time of the accident until the operation has been performed, and surgeons are shy of resorting to the process, unless the period of insensibility has been very protracted, and there is apprehension of collapse.

Trevelyan, The Rt. Hon. George Otto, M.P., P.C., M.A., the only son of the late Sir Charles E. Trevelyan, and nephew of Lord Macaulay, was b. 1838. Educated at Harrow and at Trin. Coll., Cambridge. He has held the following official appointments: Lord of the Admiralty (1868-70); Secretary to the Admiralty (1880-82); Chief Secretary to the Lord-Lieutenant of Ireland, and Keeper of the Privy Seal (1882-84); Chancellor of the Duchy of Lancaster (1884); Secretary for Scotland (Feb. 1886). Mr. Trevelyan recently (March 27th, 1886) resigned in consequence of his dissent from Mr. Gladstone's Irish policy, which cause he justified in an able speech in Parliament April 9th. Author of "Life of Lord Macaulay," etc. D.L. for Northumberland. Returned in the Liberal interest as member for Hawick Burghs (1884-85); re-elected 1885 and 1886.

Trevor, Arthur Edwin Hill-Trevor, 1st Baron (creat. 1880); was b. 1819. M.P. for county Down (1845-80).

"**Trevor, Edward**." See NOMS DE PLUME.

Trias. See GEOLOGY.

Trichina. Sir James Paget, when a student at St. Bartholomew's Hospital, was the first to discover this nematoid worm (*Trichina spiralis*) in human muscle, although the peculiar speckled appearances there presented had been noticed in a subject for dissection in Guy's Hospital by the late John Hilton, who attributed to them a parasitic nature. Professor Owen, who investigated Paget's discovery, gave to it the name of "*trichina spiralis*" (*Dubl. Journ. of Med. Science*, Sept. 1835), whilst to Herbst, Virchow, Leuckart, and Zenker is due the honour of solving the problem of its life-history, of the cycle of changes which it undergoes, and of proving the connexion between the disease trichinosis and the eating of trichinous pork; this was not clearly established until 1860, though doubtless the disease had pre-existed, but the exact nature of it had not been recognised. Trichinosis has been known to occur in many countries: Germany, Austria, Denmark, Sweden, Russia, Roumania, Switzerland, England, and the United States. In England the disease has been extremely rare, owing to the fact of the swine having been hitherto free from trichinous disease. It is more common in Germany than elsewhere, because in that country it is a common practice to eat smoked sausages and uncooked ham. It has also occurred amongst the German immigrants in America from the same cause. Russia suffered severe epidemics of this disease in 1873-4 and 1879. In Germany the State orders that all swine-flesh shall, previous to its sale, be examined by an inspector, and a severe fine is imposed upon any butcher who neglects or refuses to submit the flesh to his examination. The male worm is one-eighteenth and the female one-eighth of an inch in length. When trichinous pork is eaten, the gastric juice dissolves the gritty capsules and sets free the worms in the stomach; these in the course of a week reproduce myriads of minute trichinæ, which immediately migrate to every part of the body, more particularly the muscular tissues; muscular actions, therefore, especially of respiration, are exceedingly painful and difficult, and in severe cases complete and fatal paralysis ensues. If convalescence takes place, it is by the trichinæ encapsulating themselves in the muscles and thus remaining comparatively harmless for the rest of their life. Multiplication of them can only take place in the stomach in the manner described above. Rats have been found to swarm with trichinæ, and by some are considered to play an important part in conveying the disease.

Trilingual Inscription. See EGYPTOLOGY.

Trinoda Necessitas. See ARMY.

Tripoli. The easternmost of the Barbary States of North Africa, ruled by a vali, or governor, appointed by the Sultan of Turkey. Conjoined and subject to it are **Fezzan**, to the south, a chain of verdant oases in the desert—capital **Mourzouk**; and **Baroa**, between Tripoli and Egypt, mostly desert, but containing the site of the gardens of the Hesperides—capital **Bengasi**. The whole area may be roughly stated as 350,000 square miles, and the pop. about 1,200,000. A small Turkish garrison maintains a semblance of order. Exports are bullocks, ivory, wheat, wool, esparto grass, madder, spice, Saharan and Soudanese commodities, to a considerable value. Capital **Tripoli** (pop. 25,000), the only good port. Whole coast low and sandy; permanent rivers

few and inconsiderable, but water easily obtained by sinking wells. Since the French occupation of Tunis there has been an inclination to proceed into Tripoli on the part of that power, despite the Turkish claims. But this has been met with similar designs on the part of Italy, which has interests in Tripoli. The country therefore still remains a Turkish province. Of Fezzan almost nothing is known, since Europeans are prevented from travelling in it by the fanatical Mohammedan population.

"Trois Ecloles." See NOMS DE PLUME.

Trotter, Mr. Henry John, M.P., of Byers Green Hall, Durham, and Harkleton, North Hants, was b. 1840. Educated at Oriol Coll., Oxford. Called to the bar at the Inner Temple (1864). Is Deputy Lieutenant and J.P. for Durham. Returned in the Liberal interest as member for Colchester (1885).

Truant Schools. See INDUSTRIAL SCHOOLS, and SCHOOL BOARD FOR LONDON.

Truro, Charles Robert Claude Wilde, 2nd Baron (creat. 1850); was b. 1816; succeeded his father 1855. Is a volunteer aide-de-camp to the Queen.

Truro, Rt. Rev. George Howard Wilkinson, D.D., and Bishop of (founded 1877); son of George Wilkinson, Esq., of Oswald House, Durham b. at Durham, May 12th, 1833; educated at Durham School, and Oriol Coll., Oxford (B.A.) 1855, M.A. 1859, D.D. 1883; ordained priest (1858); was curate of Kensington (1857-59), vicar of Bishop Auckland (1863-67), St. Peter, Great Windmill Street, Westminster (1867-70), and St. Peter's, Eaton Square (1870-83), when he was consecrated to this see.

"Trusta, H." See NOMS DE PLUME.

Trust Income of City Companies. See CITY GUILDS.

Tseng, The Marquis. Envoy Extraordinary and Minister Plenipotentiary from the Court of Peking to the Court of St. James', b. 1837. His father was the Marquis Tseng-Kwo-fan. He was appointed (1878) the representative of China in Paris and London. Russia was also included in his embassy at the time of the dispute with reference to Kulджа. In the negotiations with France on the Tonquin question the Marquis Tseng was uncompromising and unyielding; nor did the ministry of M. Ferry display a conciliatory temper. The successes of France at Song-Tay and Bacninh seem to have convinced the Chinese Government that resistance was hopeless, and as the Marquis Tseng had compromised himself in the course of the negotiations, the Empress recalled him, and appointed Li Tong Pa interim ambassador in his stead. The Marquis Tseng is regarded as an astute diplomat. But his resolute opposition to French aggression in the Indo-Chinese peninsula has caused him to be regarded with disfavour by that government.

Tsins. See CHINA.

Tso Tsung Tang. See CHINA.

Tucker, Mr. Charles, F.S.A. See BOOK TRADE.

Tuckey, Captain. See CONGO FREE STATE.

Tuite, Mr. James, M.P., was b. 1849. Returned as a Nationalist for North Westmeath (1885).

Tulloch, Rev. Principal, D.D., was b. 1823, Educated at the United Colleges of St. Salvador and St. Leonard's, and the Theological College of St. Mary's, St. Andrew's University. On the death of Principal Shairp, Dr. Tulloch

became head of the University—a position he held in conjunction with that of Principal of St. Mary's for many years. Principal Tulloch besides contributing numerous papers to the *British Quarterly*, the *Edinburgh*, the *Contemporary*, and *North British Reviews*, published "The Being and Attributes of God," "The Leaders of the Reformation," "The English Puritans and their Leaders," and other works. Dr. Tulloch was one of the Queen's Chaplains for Scotland, Dean of the Chapel Royal, and editor of the *Church of Scotland Missionary Record*, and was for some time editor of *Fraser's Magazine*. He died Feb. 1886.

Tum, The God. See EGYPTOLOGY.

Tunicata, The. See ZOOLOGY.

Tunicin. See CELLULOSE.

Tunis. One of the Barbary States of Northern Africa, lying E. of Algeria, and comprising 45,776 square miles; pop. 1,500,000. Capital, Tunis, pop. 125,000—many Christians, Jews, Maltese, and Europeans. Manufactures, silk and woollen goods, shawls, carpets, mantles, fezzes, burnouses, otto of roses, oil of jessamine. Site of ancient Carthage. Till 1881 under rule of a Bey, who was nominally a vassal of the Sultan of Turkey. In that year incursions of Kabyle tribes within the borders of Algeria caused the French to invade Tunis, with the result (1881-2), that it became a French Protectorate. The Bey's functions are now limited to distributing orders among French troops, who garrison the country. Government is carried on by a French Resident, with various French officials under him. The force of occupation is nominally 15,000 men, but in reality double that number. As in Algeria, the French expenditure on administration far exceeds the revenue collected from the country. In Tunis is the city of *Kairwan*, one of the holy places of Islam. In production and manufacture, and in degree of civilisation, Tunis may be said to be most advanced of the Barbary States, next to Algeria. (Consult Broadley's "Tunis" and Hesse-Wartegg's "Tunis.")

Turkestan. A Russian province carved, between 1860 and 1875, out of the khanates and deserts of the eastern half of Central Asia. Since General Kaufmann died in 1882 its administrative area has been reduced, and now consists of about 500,000 square miles, exclusive of the dependent states of Bokhara and Khiva. The population is about 3,000,000 without those states, and nearly double with them. The principal town is Tashkent (pop., 100,000). On a peace footing the army is composed of 26,743 infantry, 7,618 cavalry, and 76 guns, but it can be raised, on a declaration of war, to 80,000, by accessions from Siberia, Orenburg, and, *via* the new route of Mervti Kultuk and Khiva, from the Caspian. In consequence of the Afghan dispute the Russian government has ordered that a force shall be always maintained in Turkestan, ready to march at a moment's notice to Afghanistan. The Mussulman population, which is scattered in groups over a large area, has become reconciled to Russian rule, and no sepoys having been raised in the country, the authorities entertain very little fear of a rising. Notoriously corrupt in Kaufmann's time, the administration was purified by his successor Tchernayeff, in 1883, who was assisted by Senator Giers, brother of the Minister for Foreign Affairs, sent thither armed with full power for that purpose. General Rosenbach, appointed 1884, has con-

tinued these useful labours, and now the Turkestan administration is well worthy of the respect it enjoys on the part of the natives. Simultaneously with this internal improvement, Turkestan has lost much of its political importance, owing to the Russian advance having been conducted by the officials of the Caucasus since 1875. None the less it will be heard of again when Bokhara is incorporated, and to its share will naturally fall the absorption of Afghanistan north of the Hindoo Koosh, should a movement in that direction be decided upon at any time by Russia. (See CENTRAL ASIA.)

Turkestan, Afghan. A province of Afghanistan north of the Hindoo Koosh, consisting of 70,000 square miles and a population, mostly non-Afghan, of nearly 1,000,000. Its best known town is Balkh, commanding the road from Turkestan to Cabul. There is really no town of Balkh, the place the Afghans have established on its site being Mazar-i-sherif (pop. 25,000). Here Shere Ali breathed his last. Most of the country has only been conquered during the last twenty years, and the inhabitants who have survived the exterminating wars of Shere Ali entertain very little love for their Afghan rulers. By race, a large proportion belong to people inhabiting the Russian province of Turkestan, and hence it is probable that it will be the next portion of Afghanistan which will come under Russian influence.

Turkestan, Eastern. A title given to Kashgaria during the simmering of the Kashgar question some years ago. It fell into disuse on the re conquest of the country from the rebel Mussulmans by the Chinese.

Turkey. An empire possessing extensive territories in Europe, Asia and Africa, governed by Sultan Abdul Hamid II. The commands of the Sultan are absolute, unless opposed to the express direction of the Koran, a legal and theological code upon which the fundamental laws of the empire are based. The legislative and executive authority is exercised by the Grand Vizier and the Sheik-ul-Islam, who are appointed by the Sultan, the latter with the nominal concurrence of the Ulama or general body of lawyers and theologians. The area of Turkey is about 2,406,492 square miles; population about 42½ millions. Revenue in 1884 about £16,313,000, expenditure about £16,223,000. National external debt about £223,000,000 in 1874. By Berlin Treaty, 1878, Bulgaria, Montenegro, Servia, and Greece were to assume a portion of the external debt, and by arrangement in December 1881 the external debt was to be reduced to about 106,000,000, and certain revenues handed over to a European commission of liquidation. In addition, there is an internal debt of £20,000,000, and an indemnity of £32,000,000 due to Russia. The army nominally numbers 150,000 in peace, and in war 450,000. The navy includes fifteen iron-clad and many other vessels. The administration is extremely corrupt and inefficient. The outlying territories have asserted their independence, or been gradually annexed by its more powerful neighbours, and the fall of the Ottoman dominion is apparently only a question of a few years. In March 1871 a conference of the leading European Powers abolished clauses in Treaty of Paris by which the Black Sea fleets of Russia had been limited to vessels for police duty. An insurrection in Yemen was repressed in May. Attempted aggressions in South Arabia by Porte checked by Great Britain (November).

An insurrection in Herzegovina broke out (June to August, 1875). In consequence of the strong remonstrances of Austria, Germany, Russia, and England, at close of 1875 equal rights were promised to Christians. An insurrection in Bulgaria and Roumelia occurred in May 1876, and was repressed with such savage cruelty, that the massacres of Batak and the Bulgarian atrocities have become historical. The promise of reform caused an outbreak of fanaticism at Constantinople, which resulted on May 20th in the deposition (and subsequent murder) of Abdul Aziz, and in the proclamation of Murad V., who was, however, himself deposed on August 31st, and the present Sultan chosen. In July, Servia and Montenegro declared war, and the Servian army under General Tcherniaieff, accompanied by numerous Russian volunteers, entered Turkey; but being defeated at Zartcar, retreated to Alexinatz, which after much fighting was finally captured in October, and Servians completely defeated. Through the intervention of Russia, however, an armistice was obtained, and peace proclaimed in March 1877. In a few weeks Russia in alliance with Roumania declared war, and crossing the Danube and the Balkans, entered Roumelia.—The sturdy defence of Plevna repulsed the Russians, and the Turkish army, advancing to the Lom, menaced the communications, while the forces in Roumelia retired to the Shipka pass, and kept the Turks at bay, until reinforcements arrived, and Plevna was taken on December 9th. The Balkans were again crossed (December). The retreat of the Turks to Adrianople in January 1878 proved most disastrous. In Asia Russian invasion made with insufficient forces at first, repulsed, but finally Kars was taken by storm and the Turks driven into Erzeroum. The armistice signed on January 31st was followed by the Treaty of San Stefano, signed on March 17th. Meanwhile the British fleet passed the Dardanelles (February 13th), and for some time it was doubtful whether the war would not be renewed by Turkey in alliance with Great Britain. A conference of the Powers was held at Berlin, and a treaty signed on July 13th by which Bulgaria and Eastern Roumelia were made autonomous—the independence of Montenegro and Servia acknowledged, with increase of territory—Roumania received the Dobrukscha and ceded Roumanian Bessarabia to Russia, who, in addition, received Kars, Ardahan and Batoum from the Porte, Thessaly was promised to Greece; Cyprus by private convention was ceded to Great Britain. Great delay was made by the Porte in executing the details of the treaty—the cession of Dulcigno to Montenegro being only obtained by a naval demonstration of the Powers in November 1880; Thessaly not being ceded to Greece until July 1881, under pressure of a European conference convened at the instance of Great Britain. Tunis was also occupied by the French in 1881, in spite of the protest of the Porte, and Egypt by Great Britain in August 1882. In 1882 the Albanian districts were in a very disturbed state. Rusdem Pasha (q.v.), governor of the autonomous province of Lebanon, under whose rule the province was one of the best administered countries in the world, was in 1883 succeeded by Wassa Pasha. Turkey, although not admitted into the Austro-German alliance, was brought into closer relations. The intrigues of Russia with Servia and Bulgaria proved to be unsuccessful.—1884.

Prince Vogorides, governor of the autonomous province of East Roumelia, was succeeded by Christovitch. Disputes arose with Austria on the failure of the Porte to meet its engagements with respect to junction between the Austrian and the Turkish railways (Sept.). On the accession of Lord Salisbury to power, Sir H. D. Wolff was despatched to Constantinople, and on Oct. 24th, 1885, signed a convention relative to the administration of Egypt. On the union of Bulgaria with Eastern Roumelia being proclaimed, a large army, ultimately amounting to 350,000 men, was placed on the Roumelian and Greek frontiers, and the Albanian league was reconstituted. Great efforts were made to raise money, even to the seizure of the pension funds; and a demonstration on the part of widows and orphans of soldiers defrauded of their pensions, etc., took place in Constantinople. A conference of Ambassadors was also held, and proved abortive, the Porte refusing to occupy Eastern Roumelia without the express mandate of all the Powers. (For subsequent events arising out of the Bulgarian question consult articles BULGARIA and RUSSIA).

Turkish Convention. Secretly signed by England and Turkey, June 4th, 1878. By it England engaged for all future time to defend the Asiatic dominions of the Ottoman Empire "by force of arms," in consideration of a promise by the Sultan to introduce all necessary reforms as agreed on by his ally, and of the assignment of the island of Cyprus, to be occupied and administered by Great Britain, its reversion to Turkey being provided if Russia should give up Batoum, Ardahan, and Kars. The convention was disclosed by the *Daily Telegraph* almost immediately after the dispersal of the Berlin Congress, and provoked an angry controversy. Up to the present, in spite of pressure by England, Turkey has failed to institute the promised reforms in Asia Minor, and the only successful feature has been the acquisition of Cyprus, the value of which is becoming increasingly obvious.

Turkmenia or Turcomania. The country of the Turcoman tribes, lying east of the Caspian. The appellation has now been changed by the Russians to Transcaspia, or the Transcaspian territory, by which it will be in future known. Sometimes English writers confuse Turkmenia and Turkestan, fancying that the two mean the same country—the "land of the Turks or Turcomans" of Central Asia, but the two have always been kept clearly distinct by the Russians; Turkmenia being restricted to the territory east of the Caspian, actually peopled by the Turcoman tribes, and Turkestan being the title bestowed on the Russian province created out of the Kirghiz deserts and the khanates of Khokand, Bokhara, and Khiva.

Turners, The Worshipful Company of. See CITY GUILDS, THE.

Tussaud, Madame, b. at Berne, Switzerland, 1760. Left an orphan very young, she was taken under the protection of her uncle, M. Curtius, artist to Louis XVI., and from him she learnt the art of modelling in wax. She was instructor to the king's sister, Princess Elizabeth, till 1798 at Versailles and the Tuileries. Here she became acquainted with the leading personages of the period. Losing her position by the revolution, she established herself in London, where her collection attracted great notice. Having visited the principal towns, she ultimately settled in the Metropolis, where

the exhibition is justly considered one of the sights. Lately the collection has been removed to new and handsome premises, erected by Messrs. Tussaud at immense cost. Madame Tussaud died in 1850, aged 90.

"Twain, Mark." See NOMS DE PLUME.

Tweeddale, William Montagu Hay, 10th Marq. of (creat. 1694); Baron Tweeddale (1881), by which title he holds his seat in the House of Lords; b. 1826; succeeded his brother in the Scottish honours (1878). Served in the Bengal civil service (1845-62); was Deputy Commissioner of Simla, and Superintendent of Hill States in Northern India; M.P. for Taunton (1865-68), and for Haddington District (1878); is hereditary Chamberlain of Dunfermline. The 8th Marq. was a representative peer for Scotland, Governor and Commander-in-chief at Madras, a Field-marshal in the army, a Peninsular officer, and aide-de-camp to the Duke of Wellington.

Tweedmouth, Dudley Coutts Marjoribanks, 1st Baron (creat. 1881); b. 1820. Called to the bar at Middle Temple (1844); is a partner in Messrs. Meux and Co.'s brewery; was M.P. for Berwick (1853-68, and 1874 till his elevation to the peerage, 1881).

"Two Brothers." See NOMS DE PLUME.

"Two Brothers" (Poems). See NOMS DE PLUME.

Two Thousand Guineas. See RACING.

Tyler, Sir Henry Whatley, M.P., of Pymmes Park, Edmonton, was b. 1827. Educated at the Royal Military Academy, Woolwich. Entered the Royal Engineers (Dec. 1844). Inspector of Railways at the Board of Trade (1853-70); Chief Inspector (1870-77). Returned in the Conservative interest as member for Great Yarmouth (1885).

Tylers and Bricklayers, The Worshipful Company of. See CITY GUILDS, THE.

Type Writer. An American invention superseding the use of the pen. The writing is done by touching keys, and the manipulation is so simple and easy that any one who can spell can use the instrument. It will print several styles of type, including capitals, small letters, stops, numbers, etc., and is superior to pen writing in legibility, accuracy, compactness, and style. The writing of the machine is fully as legible as print, and nearly as uniform; the average speed from fifty to seventy words a minute. It is always ready for use, as there is no pen to corrode, or ink to spill; and any number of copies from one to sixteen can be made on the type writer at once by the manifold process. The instrument is worked by means of keys communicating each with a lever terminating in a sort of transverse bar or crutch head which carries a type on each extremity. By means of two keys at opposite ends of the board the paper carrier is moved backwards or forwards, so that in one position it receives a blow from one end of the transverse bar, and in the other position from the second end. The ink is carried on a ribbon retaining its moisture and power of marking for several months, consequently the supply is practically continuous and inexhaustible. The size of these instruments is 10 inches by 16 inches. The "Remington" Patent Type Writer (Freeman & Roberts, 6, King St., E.C.), is the principal one in use; there are, however, other instruments, as the "Columbia" (Partridge & Cooper Fleet Street), etc.

Tyrone, Baron. See WATERFORD.

U

"Ubique." See NOMS DE PLUME.

Ultimate Analysis. See CHEMISTRY.

Ultramontane German Party. See GERMAN POLITICAL PARTIES.

Ultramontanes. See OLD CATHOLICS.

Ultramontaniam ("beyond the mountains," that is, the Alps, relatively to France and Germany). A name improperly given by some theologians in these countries, before the Vatican Council in 1870, to the generally received opinion of the Church in all ages, that the Papal utterances *ex cathedra* on things of faith or morals are irreformable of themselves without a General Council. The word was used in contradistinction to **Gallicanism** (so called from Gallia, France), which attributed infallibility and supreme authority in things of faith, morals, and discipline, only to the entire Church, the highest personification of which was a General Council. Since the definition of the Vatican Council in 1870 concerning the infallibility of the Pope, Gallicanism has become a heresy, as formerly Arianism became a heresy after the Council of Nice (A.D. 325).

"Uncle Hardy." See NOMS DE PLUME.

Unemployed Classes. The unemployed may be divided into three classes: those who cannot work, such as aged paupers; those who are willing to work, but cannot find it; and those who will not work under any circumstances. The last mentioned class are a numerous fraternity who made their power for mischief known on the occasion of the recent riots in the West End of London. During the winter season they make the Metropolis their headquarters, but at other times of the year they frequent race meetings and seaside and holiday resorts for the purposes of plunder. The second class of the unemployed—namely, honest and industrious workers—belong to various industries, and their number, of course, depends upon the fluctuations in trade. In the various branches of the building trade, and other industries depending upon the state of the weather, activity and depression are as variable as the seasons, and large numbers of men engaged in these industries are always thrown out of work in the winter. That the whole number of the honest section of the unemployed class has been augmented in consequence of the general depression of the last two years can hardly be doubted; but there is reason to believe that the distress in the Metropolis particularly, and in the country generally, is not so great as it was during the former period of commercial depression, from 1874 to 1879 inclusive. In March 1885 a **Special Mansion House Committee** was appointed to inquire into the causes of permanent distress in London, and the statement we have just made is fully borne out by their report issued at the commencement of the present year. The committee points out that a less sum than usual was disbursed from the funds of the Trades Unions last year for relief purposes, and that even in the East End of London the deposits in the savings banks increased. The committee show, however, that if those engaged in the skilled industries have not suffered

greatly from the depression, the unskilled labourers have. The docks are the index of the unskilled labour market in London, and during the past year the average daily number of applicants for work at the docks was twenty thousand. As only twelve thousand were on the average taken on, there must have been some eight thousand daily turned away. Amongst the remedies for distress the Committee recommend a better organisation of the charitable funds of the Metropolis, the income from which is roughly estimated at £3,000,000 a year. A committee under the presidency of the Lord Mayor was formed (February 1886) to aid the existing distress, which fund to (April 1886), amounted to £77,910; and the Local Government Board has authorised the guardians of the poor to take extra means to assist by outdoor relief.

Uniformitarians. See GEOLOGY.

Unison. See SCALE (MUSIC).

Unitarian. The name commonly given to Christians who do not accept the doctrine of the Trinity, or the deity of Christ. The belief in the uni-personality of God has always existed in the Christian Church; but in the post-apostolic age being accompanied by a belief in the divine nature of Christ, it tended rather to bi-theism than to Unitarianism as now understood. After the Athanasian controversy there is little Unitarianism to be found in the Church, until it was revived by Lælius and Faustus Socinus, uncle and nephew (16th century), to whom chiefly may be traced the Unitarianism of Transylvania. The name Socinian is often ignorantly applied to English Unitarians, whose theology is, however, a native growth differing in many important points from that of the Socini. In Transylvania there is a strong Unitarian Church, Episcopalian in constitution, having three Unitarian colleges. In Great Britain there is, properly speaking, no Unitarian Church or sect, though among the congregations in which Unitarianism prevails (see below), there are a few which have technically a Unitarian constitution. Many of the Presbyterian and other Protestant dissenting congregations founded after the passing of the Act of Uniformity by those who were expelled by that Act from the National Church, have passed from Trinitarianism through Arianism to Unitarianism. To these have been added others founded more recently and holding Unitarian opinions from the first. The whole now form a group of non-subscribing congregations in which Unitarian theology prevails. They are in friendly communication with each other, and co-operate for many purposes, but are very tenacious of their congregational liberty. With very few exceptions all these, especially the oldest and the most recent, have open trust deeds, i.e., free from all doctrinal conditions, and refuse to organise themselves or associate with one another on any dogmatic basis. In Ireland something of the Presbyterian form of government still remains. In England, Scotland, and Wales each congregation is entirely independent. These are commonly known as the Unitarian Churches, but their main principle is simply that of reverent religious liberty. Church membership is not limited to Uni-

tarians. Ministers are elected whose theology is in general agreement with that of the congregations; but no subscription or declaration of faith is required of them. These congregations number about 280 in England, 35 in Wales, 10 in Scotland, 40 in Ireland. For list of these and of ministers, and of various societies, etc., which are Unitarian in constitution or promote Unitarianism, see "**Unitarian Almanack**" (an unofficial publication by Jas. Black, 20, Cannon Street, Manchester). The **British and Foreign Unitarian Association** is not representative, but consists of individual subscribers desirous of promoting "the Principles of Unitarian Christianity." It refuses to affiliate congregations with itself, or to enrol any member as representing a congregation, lest the freedom of the churches should be compromised; and for the same reason it will not build or endow any property with a Unitarian trust. At the annual meeting in 1866 a motion to "define Unitarianism" was rejected by a very large majority; and subsequently the Association has declined a munificent offer for building purposes, because it is contrary to its principles to endow any society on a dogmatic basis. The new hall and offices of the Association about to be opened in Essex Street will not be the property of the Association, but will be held on an open trust, and will be used by the Unitarian Association, the Sunday School Association, and such other bodies as the trustees think fit. The Association claims no authority over churches or ministers, and is as active in the cause of religious liberty and the spread of a simple and devout Christianity, as in the cause of Unitarian theology. The only technically Unitarian College is that of the **Unitarian Home Missionary Board in Manchester**, which educates for the ministry students who are not able to enter **Manchester New College** (*q.v.*), where most of the leading Unitarian ministers are trained. There are at present two chief schools of thought among Unitarians: one regarding Jesus as a divinely appointed and authoritative teacher having miraculous powers, the other regarding Him simply as the greatest of moral and religious teachers, not possessed of any supernatural knowledge or power. The intuitive philosophy, of which **Dr. Martineau**, a Unitarian minister, and late principal of **Manchester New College**, is the ablest living exponent, prevails almost universally among Unitarians. There is a triennial Conference of non-subscribing congregations, which consists almost entirely of Unitarians (last held at Birmingham, April 1885). Unitarian theology prevails extensively among the "liberal" theologians and clergy of Germany, Holland, and the Protestant Cantons of Switzerland. The professedly Unitarian congregations of the **United States** number 339; of these 232 are in New England, many of them being old Puritan foundations. Both in England and America Unitarianism must be estimated by its influence upon society and religious thought rather than the number of its professed adherents. Much of the high moral tone and religious earnestness of the old Puritanism remains among the Unitarians of the present day; and again Unitarian theology, with its freedom of Scriptural criticism, is to be found here and there in almost every section of the Christian Church. Unitarian books, periodicals, tracts, etc., and all information as to Unitarian congregations, may be had at the offices of the **British and Foreign Unitarian Association**, 37,

Norfolk Street, Strand—shortly to be removed to Essex Street.

Unit, Astronomical. See ASTRONOMY.

"United Right," The. See FRENCH POLITICAL PARTIES.

United States. A confederation of thirty-eight sovereign states united together by a federal bond for imperial objects, the local administration being reserved to each state. By the constitution of 1787 and subsequent amendments the government is intrusted to three separate authorities—the executive, the legislative, and the judicial. The first is vested in a president elected for four years by electors appointed by each separate state. He is commander of the national forces, and has a veto on all laws passed by Congress, although a bill may become law in spite of his veto, on afterwards being passed by a two-third majority of each House of Congress. The administration is conducted under immediate authority of the president by seven ministers chosen by him, and holding office at his pleasure though confirmed by the senate. A vice-president is also chosen in the same manner; he is *ex officio* president of the senate, and in case of the death or resignation of the president he assumes his office for the remainder of the term and the senate elects a temporary vice-president. The legislative power is vested in Congress, which consists of (1) a senate of 76 members—viz., two chosen by each state legislature for six years—who confirm or reject all appointments by president, and its members constitute a court of impeachment, with power only to remove or disqualify from office; (2) of a house of representatives of 325 members, chosen every two years by all duly qualified male citizens and apportioned among the states according to population. In addition to the representatives, delegates from "territories" (not yet organised into states) are entitled to debate on matters pertinent to their interests, but must not vote. The Congress may propose an amendment to the constitution if two-thirds of both houses deem it necessary; and such amendment shall be deemed to be incorporated in constitution when ratified by the legislatures of three-fourths of the several states. The judicial power is confided to a supreme court (the members of which are nominated by the president for life) with power to interpret the constitution, to decide all disputes between the federal government and the individual states, and to hear all causes arising under the federal laws, etc. Perfect equality is accorded to all religions; education free and general, although backward in some of the former slave states,—the cost is met from state or local funds, and the federal government contributes a portion. The power to enact municipal laws is reserved to the states of which the constitutions and modes of administration bear a close resemblance to each other—the executive being confided to a governor and the legislative to one or two chambers, as the case may be. Roughly speaking, each state has voluntarily surrendered to the central government all federal matters, including taxation for federal purposes only, while reserving the right to administer all local affairs and to impose local taxes at its pleasure. The soil of the **United States** not included within the boundaries of an individual state are divided into eight "territories," the districts of Columbia, Alaska, and three Indian territories. When duly qualified by population,

etc., it is competent for the confederacy to form the territories into new "states" and admit them into the Union. There is also a "district of Columbia," a neutral territory under the direct government of the confederacy, in which is situated the capital, Washington. The total area of the Union is 3,501,404 square miles; the population, by census of 1880, 50,497,057; the estimated population in 1885 was 57,000,000. The revenue for 1886 is estimated at about £66,000,000; the expenditure about £65,000,000; the national debt on January 1st, 1885, amounted to £283,709,670, exclusive of £12,924,000 bonds issued by the Pacific railways under federal guarantee. There also exist local debts in nearly all the states, amounting in 1884 to about £52,700,000. The army is limited by Act of Congress to 25,000 men and 2,155 officers; the actual strength is about 27,000. In addition, each state is supposed to have a militia, in which all men from eighteen to forty-five, capable of bearing arms, should be enrolled. The strength of the navy is difficult to state precisely. In 1884, of 87 vessels, only 31 were estimated to be efficient, but efforts have been made during the past two years to place the service on a more efficient footing. Imports in 1885 (June 1884-85) about £156,000,000; the exports about £200,000,000, chiefly grain, raw materials, and domestic produce, about 58 per cent. of the exports go to Great Britain alone, while about one-fourth of the imports come from that country. The principal industry is agriculture, timber trade, and mining—the iron and cotton manufacturing industry is large, though fostered by protective duties; the shipping industry is practically confined to the coasting trade through the operation of the tariff. The domestic history since the close of the great civil war presents few features of note. In 1870, by amendment of the constitution, negroes were admitted to equal rights with whites. Proposals for the purchase of the Island of St. Thomas from Denmark and for the annexation of St. Domingo were rejected. In May 1871 a treaty agreeing to the reference to arbitration of the Alabama claims, fishery question, and San Juan boundary, signed with Great Britain. The first meeting of the international commission appointed under this treaty took place on December 18th, at Geneva. Claim by United States in their case for indirect damages by Alabama and other vessels, made in January 1872; continual negotiations as to matters to be laid before the tribunal caused its sitting to be adjourned to December 1872. The claim for indirect damages was finally disallowed, but on the other points the decision was mainly in favour of the United States, and damages to the amount of £3,229,166 were awarded, and payment promptly made by Great Britain. The Modoc Indians, near Oregon, repelled troops sent to remove them to other lands in January 1873. After a defence conducted with heroic gallantry against overwhelming forces, the Indians were subdued in June. General Grant (*q.v.*), who had been re-elected president, began his second term in March. Cash payments in silver were resumed in October. In April 1874 President Grant vetoed a bill for creating inconvertible paper money. Conflicts between blacks and whites in Mississippi in April. Insurrection of negroes in Tennessee in August suppressed. Insurrection of whites in New Orleans in September also suppressed. New reciprocity treaty with

Canada rejected by senate in February 1875. Colorado and New Mexico territories admitted as new states into the Union. Severe defeat of General Custer by Sioux Indians on June 25th, 1876. Election for president in December resulted in Mr. Hayes receiving 185 and Mr. Tilden 184 votes; neither securing the necessary majority, and several votes being challenged—a tribunal for the purpose being chosen in January 1877, confirmed the election of Mr. Hayes, who was accordingly installed in March. A great strike of railway servants on the Baltimore and Ohio railway, and riots in West Virginia and the Pennsylvania coalfields. Reign of terror succeeded, and the military defeated at Pittsburgh. Tranquillity finally restored by General Sheridan in July, after damages to the amount of £8,000,000. Bland's bill, making silver the standard instead of gold, was vetoed by the president in February 1878, but subsequently passed into law. Gold reaching par on December 18th, 1878, for the first time since December 1872, cash payments were resumed on January 2nd, 1879. An attempt was made in 1880 to nominate General Grant once more as a candidate for the presidency; but the feeling of the electors being strongly opposed to the election of any person, however distinguished, for a third term, General Garfield (*q.v.*) and Mr. Arthur (*q.v.*) were nominated by the republicans, and General Hancock and Mr. English by the Democrats, as president and vice-president respectively; and on November and the two former were elected and duly inaugurated on March 4th following. Garfield in his message claimed for his country the right of supervision over the Panama canal (*q.v.*), proposed by M. de Lesseps (*q.v.*), and promised civil service and financial reforms. On July 2nd he was shot by an assassin (Guiteau), and died of his wounds on September 19th, being succeeded by the vice-president, Mr. Arthur. On October 19th the centenary of the surrender of the British army at Yorktown was duly celebrated. At the close of the proceedings the British flag was formally saluted by the military and naval forces, in recognition of the strong friendship existing between Great Britain and the United States. In 1882 the elections for the house of representatives resulted in a majority for the Democrats. In March an act imposing stringent penalties upon the practice of polygamy was passed, and the "Chinese" question was temporarily disposed of by the suspension of immigration from China for ten years. On March 3rd, the day before the expiration of the forty-seventh Congress, a tariff act was passed to prevent the too rapid reduction of the national debt, and to mitigate the excessive taxation by which such reduction had hitherto been maintained, by repealing inland duties and revising the customs in the interest of protection. Mention was made in the president's message of negotiations with Switzerland for the settlement by arbitration of all questions between the two governments. In consequence of the dynamite outrages in England the law was ordered to be most strictly enforced in order to prevent the shipment of explosives for criminal purposes. After an extremely close contest the Democratic candidate, Mr. Cleveland, was elected president in *future*, the defeat of his opponent, Mr. Blaine, being mainly due to the secession of the independent members of the republican party in disgust at the selfish and corrupt tactics of his supporters.

In January 1885 an extremely stringent law upon the sale of explosives was passed. On July 23rd General Grant died, after a long and severe illness, and received a magnificent public funeral. — President Cleveland's Message, among other matters, recommended the reduction of duties upon imported necessities, and also that the further coinage of silver be suspended. — 1886. January. Committee of Congress on Coinage appointed, to consider and report on the silver question, which is now attracting great public interest. The Mormon Suppression Bill passed the Senate (see MORMONS) by 38 to 7 votes. House of Representatives by 183 votes to 77 passed the Presidential Succession Bill, adopted by the Senate, which determines the succession by giving it to the cabinet ministers. — February. Outrages against the Chinese in the western states. Protest of the Chinese Government, and claim for losses of its subjects. Resolution referred to the House by the Ways and Means Committee, providing that whenever the amount in treasury exceeds \$100,000,000, not less than \$10,000,000 per month shall be applied to payment of the debt. Customs Tariff Bill introduced. — March. Extensive tremor frauds discovered in New York. Serious labour strikes, accompanied with violence, necessitating military intervention. — April 5th. Agitation still continuing. Resolution proposed to the House with reference to rigorous treatment of American fishermen by Canada, and calling the attention of the British Government to the fact.

Universal Prime Meridian and Universal Day, The. In 1883 an International Conference was held at Washington, to discuss the question of adopting a "prime meridian" for universal use, and in connection therewith to settle on a uniform basis the various modes of time-reckoning in use in different countries. The Conference was primarily concerned with astronomical matters, but the resolutions arrived at closely affect our everyday occupations. In the first place it was agreed that the meridian of Greenwich should be the "prime meridian" from which all calculations of longitude should be made. Hitherto nearly every country has had a "prime meridian" of its own. In English maps the longitude of every place is stated to be so many degrees east or west of Greenwich; in French maps the starting-point is Paris; in Germany it is Feris Island, and so on. Hence a person looking at a map published in England would find, say Bermuda, placed in longitude 65° west (of Greenwich), while on a map published in France it would be shown in longitude 69° 20' west (of Paris). An English and a French ship, meeting at sea, would find that there would be a difference of 2° 20' between the records of their longitude. The Conference decided that this anomaly should be abolished, and that longitude should be reckoned only from the meridian of Greenwich, and that it should count 180° east and 180° west; so that in future all maps will be constructed on this principle, and ships of every nation, meeting at sea, will find themselves in the same degree of longitude, instead of, apparently, so many degrees apart. But the mode of reckoning time as well as longitude differs in different countries, and a ship sailing from, say Hamburg, and another ship sailing on the same day from London, and meeting in the evening on the North Sea, would find a difference of fifty-four minutes between their chronometers. Each would have "standard time"—one that of

England, the other that of Germany. Now, to understand what "standard" time is, we must understand the general principles of time-reckoning. The absolute "noon" at any place is the moment at which the sun reaches the highest point in the heavens, as viewed from that place, day after day. Thus, the only places which have the same absolute "noon" are those which are on the same meridian. It is noon at Valencia at the same moment as at London, but noon at London is twenty-two minutes earlier than at Penzance and seven minutes later than at Lowestoft. When railways were introduced, however, it was found impossible to regulate the hours of the arrival and departure of trains according to each "local" noon, and so it was arranged that "noon" at Greenwich (or the site of the Royal Observatory) should be reckoned as noon in all parts of Great Britain. But owing to the orbital motion of the earth, the absolute "noon," as shown by the position of the sun in the heavens, is not the same every day, being for six months of the year earlier than the average and for six months later. The average of all these variations during the year, however, is taken, and from this "mean noon" the twelve hours "before noon" (*ante meridiem*), and the twelve hours "after noon" (*post meridiem*), are calculated. By Greenwich mean time, thus fixed, all the clocks are regulated, instead of by the "local" absolute noon as shown by the sun. In the same way Paris mean time has been made the "standard" time in France, Berlin mean time in Germany, and so on. But while the inconveniences of an interminable succession of "local" noons have been so far removed in each country, the same inconveniences exist as between different countries. If a telegram is despatched from Berlin at "noon" (by German time), and takes thirty minutes in transmission, it reaches London at twenty-four minutes before noon (by Greenwich time). The Washington Conference agreed that, for astronomical purposes, "noon" at Greenwich should be "noon" all the world over, and that, just as there is to be one universal "prime meridian" for calculating longitude, so there shall be one "standard time" reckoned from mean "noon" at that meridian. It further agreed that the day, instead of being divided into two portions of twelve hours each, should be divided into twenty-four hours, counting from midnight. Hitherto astronomers have divided the day into twenty-four hours beginning at noon; so that the astronomical day was only one hour old when the civil day had already completed one whole series of twelve hours and the first hour of the second series. While, therefore, astronomical time has now accommodated itself to civil time, by commencing its day at midnight, civil time will find it convenient to accommodate itself to astronomical time (1) by counting the twenty-four hours right through from midnight to midnight, instead of in two series of twelve hours each; and (2) by employing the one universal standard of Greenwich time for all purposes of international concern. For example, if a telegram is sent from London at 1 p.m., and reaches New York in an hour, the operator at New York, under the old system, marks "1 p.m." as the hour of despatch and "8.4 a.m." as the hour of receipt! In other words, the telegram, after being delayed an hour *en route*, appears to have reached its destination five hours before it was sent off.

Under the new system the hour of despatch would be marked as 13 o'clock, and the hour of receipt as 14 o'clock. But at 14 o'clock (by universal time) people in London are having lunch, while in New York they are only just having breakfast; surely, it will be urged, as much inconvenience will arise from the new as from the old system of time reckoning? No. While "universal" time will be used for international purposes, "local" time will still be used for local purposes; but a reform will be effected in the methods of fixing the local standards. As the earth is divided into 360 degrees and the day into twenty-four hours, it follows that every fifteen degrees represents the difference of an hour in time. If the earth be divided into twenty-four equal parts, longitudinally, at every fifteenth meridian, and if the "local" mean noon of each of such meridians be adopted as the "standard" noon of all places $7\frac{1}{2}$ degrees each side of it, we shall have the following result:—When it is "noon" at Greenwich, and at all places within $7\frac{1}{2}$ degrees of Greenwich, it will be 11 o'clock by "local" standard (but still "noon" by universal) time for all places between $7\frac{1}{2}$ and $22\frac{1}{2}$ degrees west of Greenwich, and 13 o'clock by local "standard" (but still noon by universal) time for all places between $7\frac{1}{2}$ and $22\frac{1}{2}$ degrees east of Greenwich, and so on throughout the world. "Universal" time will be the same universally, and local time will differ from it only by even hours, instead of by the various odd minutes by which local standards differ from each other at the present time; while in no case will the difference between "standard" noon and "absolute" noon at any place exceed half an hour. Messrs. Kendal and Dent, of 106, Cheapside, have produced a watch with two hour-hands, one black and the other gold, so contrived that one of them always represents "universal" time, while the other may be altered according to the numbers of hours difference between "local" and "universal" standards. Thus a traveller, wherever he may go, will always carry Greenwich time (as the universal time) with him, and keep local standard time simultaneously by simply putting one hand backwards or forwards an hour at a time as required, and without having to make intricate calculations as to the exact number of minutes' and seconds' difference between the standard times of different capitals as at present.

University Extension. I. **Cambridge Scheme.** In 1872 the University of Cambridge, in response to many memorials from large towns, appointed a Syndicate to "organise lectures in popular places." The scheme grew rapidly, and the Syndicate has conducted lectures in more than sixty towns. The classes are very large and the fees are low—five shillings for a course of twelve lectures—and class teaching being about the average; and the lecturers are men of university standing, who give lectures of nearly the same character as they would deliver at the universities themselves. In some cases these lectures have led to the foundation of permanent educational institutions. The most splendid instance is that of Nottingham, where in 1880 an anonymous donor gave £10,000, and the Town Council accepted it, on condition that an University College should be provided to the satisfaction of the University of Cambridge, as a permanent home for the Extension movement there. This has been done, and is now in a very flourishing

condition. Similar results have followed on a less scale in Chesterfield, Liverpool, Sheffield, and elsewhere. II. **London Scheme.** Many university men resident in London saw their way to applying in and around the metropolis what had been thus so successfully carried out in the great towns of the north. Sir Thomas Gresham had intended in his famous bequest, dating from Elizabeth's reign (1579), to bring university teaching to the doors of the citizens of London, and intrusted funds to the Mercers' Company for that purpose. In 1878, some London residents secured the co-operation of the three universities of Cambridge, Oxford, and London, each university agreeing to nominate three distinguished persons as a "joint board," and the joint board of nine undertaking to select lecturers, examiners, etc., and to advise generally. The chairman is Professor James Stuart, M.P. A society was formed for the management of the scheme, called the "**London Society for the Extension of University Teaching**," with the Right Hon. G. J. Goschen, M.P., as its president, and with a council of twenty-two elected members of very high educational distinction, to whom are joined ten delegates from the great London educational institutions, the Royal Institution, the London Institution, Bedford, King's, Queen's, University, and other colleges, etc. Any place in or near London may constitute itself a centre of this Society without any further membership or formality, and may apply for a lecturer on any of the recognised subjects, the council sharing part of the risk, and cordially co-operating in every way. The local expenses and hire of rooms fall entirely upon the local centre, and therefore in every case there is formed a local fund, or a guarantee to cover possible deficiencies. Twenty-six such centres are or have been at work, and the fees charged range from a shilling to a guinea for the course, though the teaching is of the same excellence in every case. In 1885, for instance, there were four courses in Whitechapel (see one shilling), and the number of their students varied from 100 to 150 each. Of course this centre is a very poor one, and is largely aided by subscriptions and grants. The richer centres have higher fees, and are self-supporting. The lectures are in courses of ten or twelve, are always accompanied with class teaching, and conclude with an examination (free) by some independent examiner. As a rule, 2,000 to 2,500 students are at work under the London scheme. The session (of two terms) covers a little more than the six months from October to March. The offices of the Parent Society are at 22, Albemarle Street, and the yearly subscription is £2 2s., entitling to admission to all lectures at all centres.

University Matches. See BOAT RACE, CRICKET, FOOTBALL.

Upholders, The Worshipful Company of. See CITY GUILDS, THE.

Uruguay. Capital, Monte Video. A republic under a president elected for four years. Legislature is composed of a Senate elected for six years by departments, and a Chamber elected for three years, one for each 3000 of population. In the recess a permanent committee of two senators and five deputies assume legislative power and control of general administration. State religion Roman Catholic, but all others tolerated. Education fairly good: about one in twenty of inhabitants attend school. Area 73,538 square miles. Population

about 700,000. Estimated revenue for year ending June 30th, 1885, £2,476,595; expenditure £2,451,170. Debt £12,908,956. Army about 3,500, with reserves about 23,000.—With the exception of the Blanco unsuccessful insurrections in 1871-2 and a rising in Monte Video in 1875, peace has been fairly well maintained during the last fifteen years; although an insurrection headed by General Arredondo broke out on (March 20th, 1880). A telegram, however, from Monte Video states (April 5th) that the revolution had been suppressed by the government, and that General Arredondo had taken refuge in Brazilian territory.

"Utah" of England. See JEZREELITES.

Utilisation of "Waste Materials." The. In many branches of manufacture, especially in the earlier days of their existence, certain portions of the materials used have been cast aside as "waste," that designation implying that such portions were available for no useful purpose. As time has advanced, first in one branch and then in another, this "waste" material has been experimented upon with a view to finding some profitable use for it; and in most instances the experiments have had a more or less satisfactory result. In connection with the manufacture of coal gas this success has been conspicuous. When gas works were first established the one idea present to the minds of the managers and directors was to extract the highest proportion of gas from a given quantity of coal. The tar separated in the course of distilling the coal, the ammoniacal liquor, and the lime from the purifiers, were reckoned of no account, and their disagreeable odour led to their being got out of the way as speedily as possible. In course of time, however, this prejudice was overcome, and proper investigation showed that the "residual products," as they are now called, could, in the hands of the chemist, be turned to profitable account. The consequence is that gas companies now derive something like 30 per cent. of their revenue from "residual products." Coal tar assumed a really important position when it was discovered that alizarine, the principal colouring-matter in the madder root, could be extracted from it. This discovery, made about five-and-twenty years ago, was rapidly improved upon, and the whole range of aniline dyes was placed at the service of the calico printer and dyer. Madder, of which we were wont to import a million pounds' worth annually, has been almost driven out of the market—a fact which will not be wondered at when it is stated that our dyers are able to meet all requirements by the use of 6,800 tons of alizarine, the present cost of which is £456,960; whereas to accomplish the same work they would require 61,200 tons of madder, which, at the average price of the fifteen years preceding 1870, would cost £2,907,000.—The Scotch mineral oil trade owes its origin to an equally happy discovery. The bituminous shale from which the oil is distilled occurs in layers among the ordinary coal; and the miners and their employers had long looked upon the material as worse than valueless, as it had to be taken out along with the coal, separated, and thrown on the waste heap. At some collieries the waste heaps assumed the proportions of hills. Mr. James Young, a chemist in Manchester, obtained a patent in 1850 for a process "for treating bituminous coal to obtain paraffin and oil contain-

ing paraffin." He bought the shaft at a nominal figure, and established works for distilling oil from the hitherto despised material. From that day a change came over the fortunes of the shale-producing district, and the foundation was laid of what has for a quarter of a century been an important branch of Scottish industry. Mr. Young early gave attention to his "residual products," and succeeded in turning them to profitable account. In various branches of the chemical manufacture similar things have been done,—notably at St. Rollox Chemical Works, Glasgow, where the solution of the great problem of the regeneration of sulphur from soda-waste ranks among the feats accomplished. In the process of smelting iron in the old type of blast furnaces there was an enormous waste of gas; but now the furnaces are made with covers, and this gas is collected and applied to the heating of the steam boilers and other purposes, thus effecting a great saving of fuel. —In dealing with the utilisation of "waste" materials, rags claim mention, but as the part they play is well known to everybody, we need say no more here. Shoddy is usually spoken of with disdain, being regarded as a symbol of imposture. This is hardly fair, for shoddy fills a most useful place in the sartorial economy of the people. It is composed of woollen rags ground in a machine called a "devil," and is converted into cloth by being mixed and spun with a certain proportion of wool. The towns of Batley, Dewsbury, and Heckmondwike are the chief seats of the shoddy trade, and they work up over £500,000 worth of woollen rags every year. The cloths produced from shoddy are suitable for many purposes, and as they are cheap, they enable poor people to be clad more warmly than they could afford to be if limited to clothes made of new wool. In connection with the preparation of raw silk a considerable amount of "waste" occurs, and a very hopeless looking material it is. Many attempts had been made to turn it to some useful purpose, but no success attended these until the stuff came under the notice of Mr. S. O. Lister, of Manningham, near Bradford, who had already won distinction as the inventor of the best wool-combing machine known. Mr. Lister obtained a quantity of the waste silk, and after spending a quarter of a million of money in experiments, succeeded in conquering the hitherto intractable material, of which large quantities are now worked up in Bradford, chiefly in the form of velvets.—The manner in which animal products are disposed of afford a good illustration of the utilisation of so-called "waste" materials. No part of the ox killed for food is absolutely worthless—the horns, hoofs, and hair having their purchasers as well as the flesh and the hide. The latter, indeed, is now made to do repeated duty, for there is such a thing as "artificial leather," in which it may ultimately figure. The instances given—to which may be added Slag Pottery, ornamental vessels made from the refuse slag of the iron furnaces—will serve to show how so-called "waste" materials are being utilised but, speaking generally, it may be said that such a thing as "waste" is now hardly known in the arts. (See MINERAL WOOL.)

U. U. A small society of educationists, chiefly Public School masters. Its title is an abbreviation of "United Ushers." They hold occasional meetings for the discussion of educational questions.

V

"Vacant Book." See TRADES UNION.

Vaccination Acts (1867-74). These Acts constitute the several boards of guardians of the poor vaccination authorities for their respective unions. Each union is to be divided into as many vaccination districts as convenience requires; and in each district a duly registered medical practitioner is to be appointed public vaccinator, and to receive for each vaccination a minimum fee varying from 1s. 6d. to 3s., according to the distance which he has to go. Contracts made by a board of guardians with a public vaccinator require confirmation by the Local Government Board. Within seven days after registration of the birth of a child the registrar must serve upon the parent notice requiring the child to be vaccinated within three months, and stating when and where the public vaccinator will attend to perform the operation. When the child has been vaccinated, it must, upon the same day in the following week, be taken before the public vaccinator for inspection. If the vaccination has been unsuccessful it must be repeated; but if it should be thrice unsuccessful, or if the child has had small-pox, the public vaccinator is to give the parent a certificate exempting the child from further vaccination. If the vaccination has been successful he must transmit to the vaccination officer (whose function it is to see the law enforced) a certificate to that effect. The public vaccinator, if of opinion that the child is in a state not allowing of successful vaccination, is to transmit to the vaccination officer a certificate to that effect available for two months, and renewable if circumstances so require. Where the vaccination is performed by any other medical man, the parent is charged with the transmission of certificates. No charge is to be made by the public vaccinator. Vaccination at the public expense is not to be considered poor relief for purposes of disqualification. A justice of the peace may make an order for the vaccination of any child under fourteen years, if he find that the child has not previously been vaccinated. The penalty for any offence against the Acts is a fine not exceeding 20s. The wilful signing of a false certificate or duplicate is punishable as a misdemeanour. For further details consult the text of the Acts and the General Order of October 31st, 1874, made by Local Government Board. In the year 1880 Government introduced a bill to exempt from any further penalties under these Acts any parent who had already paid one full penalty of 20s., or had been twice adjudged to pay any penalty. The bill was dropped. See also ANTI-VACCINATION.

Vagrants. See PAUPERISM.

"Valbert, G." See NOMS DE PLUME.

Valencia. See SPAIN.

Valency of an Element. See CHEMISTRY.

Valentine, Mr. Charles James, M.P., was b. at Stockport, 1837. He is managing director of the Moss Bay Iron Company, a director of the Cockerhmouth and Workington Railway Company, and of several local industrial undertakings. Mr. Valentine is J.P. for Cumberland. Returned in the Conservative

interest as member for the Cockerhmouth Division, Cumberland (1885).

Vambéry, Arminius. The eminent Hungarian traveller, geographical explorer and writer, b. 1832 at Duna-Szerdahely. He studied at Pesth. In 1848, having joined the national Hungarian movement, he on its suppression by Austria left his native country and sought refuge in Constantinople, where he studied Oriental languages. When there he formed the idea of visiting Central Asia, and was the first European who succeeded in making his way through the Turcoman provinces. Starting in 1863, he traversed the Turcoman desert, visiting Khiva and Bokhara. In the last-mentioned place he had an interview with the Emir without being recognised as a foreigner. After visiting many other places, he returned by the south of the desert. This remarkable expedition was fruitful in geographical, philological, and ethnological information, contained in a work entitled "Relation of Travel in Central Asia (1862-64) by a Pretended Dervish," published in Hungary, in Germany, and in England. On his return to Pesth, Vambéry was appointed professor of Oriental languages in the University of Pesth. He has written several other important works on his travels.

Vanderbyl, Mr. Philip, M.P., of Northwood, near Winchester, was b. Cape of Good Hope, 1827. Educated at Edinburgh University, and graduated with honours (gold medalist) in medicine. Formerly President of the Royal Medical Society of Edinburgh, and lecturer on anatomy and histology at the Middlesex Hospital. Retired from the medical profession (1858), and is now an Australian merchant and banker, and a director of the East and West India Dock Company. Returned in the Liberal interest as member for Bridgwater (1866-68); Portsmouth (1885).

"Vanderdecken." See IRVING, HENRY.

Van Diemen's Land. See TASMANIA.

Vane, Earl. See LONDONERRY.

Vanthay Revolt. See CHINA.

Vaughan, Prof. Henry Halford. See BOOK TRADE.

Vaux of Harrowden, Hubert George Charles Mostyn, 7th Baron (creat. 1523); b. 1860. The peerage was called out of abeyance 1838.

Vaux, Mr. W. S. W. See BOOK TRADE.

Vectors. See QUATERNIONS.

Vegetarianism is defined as the practice of living solely on the products of the vegetable kingdom—grains, pulse, fruits, and nuts, with or without the addition of eggs and milk, and its products, as cheese and butter—to the exclusion of fish, flesh and fowl. Briefly condensed, the argument in favour of the system is that it was the primitive diet enjoined at the Creation; that in the opinion of the most distinguished scientists man's structure itself clearly indicates his total inadaptation to a flesh diet; that it is impossible for the flesh of animals to be free from impurities; that the non-animal kingdom easily furnishes a perfect diet, which, if generally adopted, would be followed by such a rearrangement of the cultivation and employ-

ment of the land as would enable the country to support a greater population, and render it independent of a foreign food supply; that it is favourable to temperance, a peaceful disposition, and purity in thought and life; that it is intuitively preferred by children; that it is infinitely cheaper than a flesh diet; that its adoption would enable the working classes not only to live better, but to save money; that it would stay the revolting horrors of the slaughterhouse, and relieve women from disgusting duties, and a large number of the population from a degrading occupation; that much better health is invariably enjoyed by vegetarians, who are also less liable to give way to intemperance; that while the carnivorous vulture, hawk, tiger, hyæna, crocodile, and shark, are totally devoid of sympathetic and gentle feelings, the animals of the greatest intelligence, power, endurance, and courage—horses, elephants, camels, oxen, and gorillas—are sustained on a frugivorous diet, which has been found most suitable by not only those who perform the hardest physical toil—as instance the ancient Spartan and Grecian and Roman armies, and the modern Chinese and Coolie labourers—but has been favoured by such moulders of thought and mental workers as Buddha, Pythagoras, Plato, Seneca, Plutarch, Milton, Newton, Linnæus, Cheyne, Rousseau, Wesley, Swedenborg, Franklin, Shelley, Lamartine, and thousands of well-known men in more modern times; that those who have fairly tried the system for any length of time give a general testimony in its favour; and that finally, with the practice of the diet, there is an inner consciousness, which grows ever stronger, that it is right. ("The Perfect Way in Diet," Dr. Anna Kingsford; "Fruits and Farinacea," John Smith; "Ethics of Diet," Howard Williams; "Essays on Diet," Professor F. W. Newman.)

Vegetarian Society. A society consisting of members, associates, and subscribers, formed at Manchester in 1847, to promote the use of cereals, pulse, and fruit, as articles of diet; and to induce habits of abstinence from fish, flesh, and fowl, as food. The minimum annual subscription is half a crown. Members are pledged to adopt the vegetarian diet, associates simply agreeing to promote the objects of the society. It has been represented by the *Vegetarian Advocate*; *Vegetarian Messenger* (monthly), 1849 to 1859; *Journal of Health*, 1860; and *Dietetic Reformer and Vegetarian Messenger* (quarterly), 1861 to 1871. The *Dietetic Reformer* (monthly) has been published since 1871. The presidents of the Society, which has corresponding members in various parts of the world, have been James Simpson, J.P., Accrington; William Harvey, J.P., Salford; James Houghton, J.P., Dublin; Professor J. E. B. Mayor, M.A., Cambridge; and Professor F. W. Newman, Weston-super-Mare—Professor Mayor now holding office. Its work is done by means of lectures, public meetings, cookery lessons, cheap or free meals, and the circulation of a very large quantity of literature. The annual income is £2,000 (1885); and the number of members 3,000, and associates 1,300. Competent lecturers are supplied free of cost. The Society, with which the Food Reform Society (London), was incorporated in September 1885, invites correspondence. (See **VEGETARIANISM**.)

Hon. Sec., W. Gough Birchby, F.R.M.S.; Finan. Sec., Joseph Knight. Offices, 75,

Princess Street, Manchester; and 62, Ludgate Hill, London, E.C.

Veitch, Dr. W. See **BOOK TRADE**.

Veller, Herr Augustin. See **OLD CATHOLICS**.

Venezuela. A republic governed by a president, assisted by Senate, three members nominated by each province, and a House of Representatives, elected directly, one member to every 35,000 of population. Roman Catholicism is the state religion, but private exercise of all others is permitted. Education is in a backward state, but efforts have been recently made for its improvement. Area 632,695 square miles. Pop. in 1884 about 2,120,000. Revenue in 1883 about £5,200,000; expenditure about the same amount. In 1881 the debt, which formerly amounted to nearly £11,000,000, was consolidated; it is now estimated at about £4,000,000. Army about 2,500, exclusive of militia about 60,000 strong. The history of Venezuela since 1870 presents little of interest except chronic civil war on a small scale. In 1883 railway communication with the interior was being developed, and a new and more liberal tariff was framed.

Ventry, Dayrolles Blakeney Eveleigh de Moleyns, 4th Baron (creat. 1800); b. 1828; succeeded his father 1868. Was elected one of the representative peers of Ireland (1871).

Venue. Is defined as follows by Mr. C. Sweet, in his "Law Dictionary":—"In criminal procedure, the venue is a note in the margin of an indictment, giving the name of the county or district within which the court in which the indictment is preferred has jurisdiction." The general rule is that the venue should give the jurisdiction within which the crime has been committed. But there is a long list of exceptions to this rule. In civil procedure venue has been abolished.

Venus. See **ASTRONOMY**.

Verdi, Giuseppe, until the rise of Arrigo Boito, was the only Italian opera composer of eminence, and his works still dominate the Italian stage. He was the son of an innkeeper at Rancola, in the Duchy of Parma, was b. 1814, and studied at Milan. His first work of any importance was the incidental music to a drama, "Oberto di San Bonifazio" (1839), but he quickly rose to supremacy on the opera stage with such works as (to name only the chief of them) "I Lombardi" (1843), "Ernani" (1844), "Rigoletto" (1851), "Il Trovatore" (1853), "La Traviata" (1853), "Un Ballo in Maschera" (1859), "Aida" (1871) and "Montezuma," his last opera, produced in 1878. In "Aida," written for Ismail, Khedive of Egypt, and produced at Cairo, Verdi has adopted much of Wagner's style. A fine dramatic gift and a love for showy, taking melodies, lie at the root of Verdi's remarkable success. In 1874 he composed the "Requiem" for Alessandro Manzoni. Since "Montezuma," which was not very successful, and has not been heard in England, Verdi has not produced anything of importance.

Vermes. See **ZOOLOGY**.

Verne, Jules. French romancer, b. Feb. 8th, 1828, at Nantes. He studied law, both there and at Paris. He began writing short pieces for the stage, and in 1863 commenced his series of marvellous stories, which have made his name almost an household word. An attempt on M. Verne's life was made recently (March 1886), but happily was unsuccessful.

Verney, Captain Edward Hope, R.N., M.P., P.C., of Rhanva, Anglesey, eldest son of Major Sir Harry Verney, Baronet, was b. 1838. He

entered the Royal Navy (1851), became captain (1877), and served in the Crimea and in the Indian Mutiny. He is Deputy Lieutenant for Buckinghamshire and Anglesey, J.P. and Chairman of the Quarter Sessions for Anglesey. Capt. Verney was returned in the Liberal interest as member for North Bucks (1885).

Vernon, George William Henry Venables-Vernon, 7th Baron (creat. 1762); b. 1854; succeeded his father 1883.

Veror. See QUATERNIONS.

Vertebrata. See ZOOLOGY.

Verulam, James Walter Grimston, 2nd Earl of (creat. 1815); b. 1809; succeeded his father 1845. Was a Lord-in-waiting to the Queen (Feb. to Dec. 1852, and Feb. 1858 to June 1859); was M.P. for St. Albans (1830), for Newport (1831), and for Herts (1832-45).

Victoria. The smallest of the colonies in the Australian continent. Occupies the south-eastern corner. Divided from New South Wales on north by Murray river, and from South Australia on west by 141st meridian E. long. Extends 480 miles E. to W., and 240 miles N. to S., containing 87,884 sq. miles. Pop. 961,276, including 13,000 Chinese and 780 aborigines. Originally a part of New South Wales. Settlement begun in 1834, by a few shepherds and stockmen. Then known as "Australia Felix," and afterwards called **Port Philip Settlement**. Remained part of New South Wales till 1851, when separated, and received representative government as colony of Victoria. Pop. then about 76,000. Existence of gold known previous to this year, but kept secret, Government endeavouring to suppress all search for it. In 1851 many finds, resulting in great rush of gold-seekers to the colony. In 1854 population risen to 312,000. Then occurred **Ballarat riots**, and a serious battle between military and diggers. Responsible government granted the same year, and a constitution formed. Representation and electorate for legislative council reformed in 1881, after much party political strife. **International Exhibition** in 1880-81. Executive is vested in governor and responsible ministry. Two Houses of Parliament: upper, Legislative Council; lower, Legislative Assembly. Council consists of 42 members, of whom 14 retire every two years. Members must possess estate worth £100 per annum. Electors must occupy property worth £10 per annum if their freehold, £25 if rented, except they are university graduates, clergy, schoolmasters, doctors, lawyers, or officers of army or navy. Legislative Assembly elected triennially on manhood suffrage. Clergy of all denominations and convicts excluded from both Houses. Port Philip is defended by forts. The colony possesses 2 ironclads, 3 torpedo boats, and 2 gunboats; 7 cruisers and other war vessels are to be added. The colony is spending large sums for defence. There is a volunteer force of 3,035, cavalry, infantry, engineers, artillery, with 550 guns. A paid militia is projected. Victoria is divided into 37 counties, within which there are at present 57 cities and boroughs and 117 shires or rural municipalities. The whole colony is also divided into four great districts. These are **Gippsland**, 13,898 square miles, part mountainous, part rich alluvial soil, heavily timbered, much farming and grazing, gold, silver, copper, iron, tin, lead, coal, marble; grows oranges, fruit, hops, tobacco, opium; lake fishing, shooting, picturesque. **Murray**,

mountainous, forested, much grazing country, gold, vines, tobacco; **Wimmera**, 25,000 square miles, pastoral, sandy plains, scrub, badly watered; **Loddon**, pastoral, auriferous. Climates generally healthy, pleasant, but warm. Hot north winds, and cold winds from south, rather distressing at certain seasons. Capital **Melbourne**, pop. 325,000, situated on Port Philip and river Yarra. In 1836 it consisted of half a dozen huts; now it is a splendid city, and rivals Sydney. Among its chief institutions are the university, museum, mint, botanical gardens, observatory, public library, and hospitals. Other cities are Ballarat, 41,000; Sandhurst or Bendigo, 40,000; Geelong, 21,000; Castlemaine, 8,600. Leading towns, Creswick, Echuca, Hamilton, Kyneton, Maryborough, Portland, Sale, St. Arnaud, Stawell, Warramboul, etc. In 1884-5 there were 2,323,493 acres in cultivation. The output of gold since 1851 is estimated at value £212,000,000. About 1,700 miles of railway and 4,000 of telegraph. Revenue, £6,290,653; expenditure, £6,212,517; debt, £28,331,992; exports, £16,050,465; imports, £19,201,633. Revenue derived from customs, land tax, sales of land, stamps, railways, and telegraphs. Wool is the staple production, other than minerals. Estimated number of sheep is 10,739,000, and wool crop 61,000,000 lb. There are 275,516 horses, 329,198 milch cows; other cattle, 957,069; pigs, 241,936; goats, 68,426; asses and mules, 200. Agriculture now improving: 1,100,000 acres under wheat, 188,000 under oats, 5,000 acres under vine, producing 723,560 gallons of wine and 1,453 gallons of brandy; tobacco, 1,461 acres, producing 12,876 cwt. Olive and mulberry also planted and grown successfully. Manufactures advancing with rapid strides. There are 2,856 factories and works, of which 1,336 employ steam power: aggregate horse-power 18,771, and 49,373 hands. Capital so invested represented as £10,200,000. There are 612 leasehold runs, averaging 23,426 acres. They are rented at about 14d. per acre, and return about £88,000 per annum. One-fifth of the land of the colony consists of mallee scrub, lakes, lagoons, etc. Nearly a quarter is mountain forest. Less than half has been alienated. About 9,000,000 acres of available land still remain open for selection, as leasehold runs, purchased farms, or fifteen-acre free homesteads. Education is compulsory, and is free and secular. There is a Minister of Education, who is responsible for appointments and school properties. There are colleges and grammar schools, and numerous private or religious denominational establishments. Besides gold, the minerals worked have been copper, tin, iron, antimony, limestone, marble, coal, slate, ochre, silver, kaolin, magnesite, gypsum, diamonds, and sapphires—the last two to a small extent. Gold is found both in quartz and in alluvial deposits. The great Australian Cordillera, the dividing range, passes into Victoria on the north-east, and traverses it from east to west. It is known as the Warragong and Muniyong Mountains, sometimes erroneously styled Australian Alps. The chief river is the Murray, forming the greater part of the northern boundary. The only other navigable streams are the Yarra-Yarra and some small rivers in Gippsland. There are various lakes, mostly salt, some on the sea margin. (For fuller information consult Gordon and Gotch's "Australian Handbook for 1886," Blair's "Cyclopædia of Australasia," Walsh and Turner's "Victoria,"

Wallace's "Australasia," etc., and official publications.) It may be added that, although Victoria is the smallest colony of the Australian group, it is probably the most important at present in regard to wealth and population.

Victoria University, Manchester, and Women's Rights. See WOMEN'S RIGHTS.

Village Communities. See LAND QUESTION, THE.

Village Communities of India. See DEMOCRACY.

Villiers, The Rt. Hon. Charles Pelham, M.P., P.C., was b. 1802. Educated at Cambridge, where he graduated M.A. Called to the bar at Lincoln's Inn (1827). An Examiner in the Court of Chancery (1833-52). Judge Advocate-General (1852-58), and President of the Poor Law Board, and member of the Cabinet (1859-66). He is a Deputy Lieutenant and J.P. for Hertfordshire. Returned in the Liberal interest as member for Wolverhampton (1835-85); re-elected for South Wolverhampton 1885.

"Vincent" Burner, The. See ILLUMINANTS.

Vincent, Mr. Charles Edward Howard, M.P., was b. 1849. Educated at Westminster School and the Royal Military Coll., Sandhurst. Entered the 23rd Royal Welsh Fusiliers (1868), retired (1873). Called to the bar (1876), and was appointed Director of Criminal Investigations (1878), which post he resigned (1884). Returned in the Conservative interest as member for Sheffield, Central Division (1885).

Vintners, The Worshipful Company of. See CITY GUILDS, THE.

Violin, the king of all bowed instruments, received its present shape, altered from the older viol (*violino* means "small viol") at the hands of Gaspar di Salo, of Brescia, 1550 to 1610. The contra basso, or double bass (Ital. *violone*, "great viol"), still retains many of the viol characteristics, as the flat back, etc.; though its diminutive, the violoncello ("little violone"), follows the violin model exactly. Maggini was another great Brescian maker. Pupil in the new style of either one or the other at the close of his life was Andrea Amati, a viol maker of Cremona, 1520-77. Amati's brother, Nicolò, and his sons Antonio and Geronimo, also made fine violins, violas, and violoncellos at Cremona; but the greatest of the family was Nicolò (1596-1684), son of Geronimo and grandson of old Andrea. He was one of the best makers, and is surpassed only by his pupil Stradivari, and by Joseph Guarnerius (Guarnieri and Stradivari). Antonio Stradivari (1659-1737) did not alter his master's models in any fundamental points, but at the same time he perfected it in every detail, and his violins, violas, and violoncellos are the most beautiful and the finest toned that have ever been produced. His great rival, Joseph Guarneri (1683-1745), the favourite maker of Paganini, is sometimes said to be his pupil; but probably Joseph was the pupil of his own uncle, also named Joseph. Joseph son of Andreas (so called to distinguish him from the "great Joseph"), himself a great artist, worked with his father, and the latter was a fellow pupil with Stradivari in Nicolò Amati's workshop. Peter, son of Andreas, is another very fine maker of this talented family. Another famous family, of father and two sons, working between 1668 and 1725, was that of the Ruggieri. Jacobus Stainer, of Innsbruck (1621-83) possibly a pupil of Amati, and Matthias

and his son Sebastian Klotz, of Bavaria, working from 1683 to 1720 greatly on Stainer models, are the finest German violin-makers.

Virchow, Professor. See GERMAN POLITICAL PARTIES.

Vivi and Léopoldville Railway. See CONGO FREE STATE.

Vivian, Charles Crespiigny Vivian, 2nd Baron (creat. 1841); b. 1808; succeeded his father 1842. Was M.P. for Bodmin (1837-42).

Vivian, Sir Henry Hussey, Bart., M.P., of Park Wern, Swansea, was b. 1821. Educated at Eton and Trin. Coll., Cambridge. Is J.P. and Deputy Lieutenant for Glamorganshire. Col. 4th Glamorgan Rifles. Returned in the Liberal interest as member for Truro (1852-57); Glamorganshire (1857-85); re-elected unopposed 1885.

Vivisection is practised as a means of investigation, by direct experiment upon animals, of the laws which govern life, the processes of disease and the action of therapeutic remedies. William Harvey, who discovered the circulation of the blood (1616), John Hunter, and many other physiologists, have by means of physical research added to the store of scientific knowledge, the value of which it is impossible to estimate. Vivisection in England can only be undertaken by those teachers of physiology who have obtained a Government licence. Valuable work in the domain of experimental pathology is being carried out by Burdon-Sanderson, Klein, Greenfield, and others in this country, and by Pasteur and Koch in France and Germany. The Anti-Vivisection Society, actuated (as contended by Vivisectionists) by a sense of mistaken humanity, seeks to destroy this method of physical research, by which alone the actions of new remedies and the phenomena produced by them in health and disease can be ascertained. (For arguments against, see ANTI-VIVISECTION.)

Volkakunde. See FOLK LORE.

Volkspartei, Die. See GERMAN POLITICAL PARTIES.

Voluntary Schools. Voluntary schools are those public elementary schools which are managed by voluntary bodies (mainly religious) and the cost of which is partly defrayed by voluntary subscriptions. Until 1870 all elementary schools were of this nature. In that year, however, an Act was passed by which education was made compulsory, and board schools came into existence. Voluntary and board schools agree in the following points:—
1. The average weekly fee must not exceed 9d., and the average attendance must not be less than 30.
2. Religious instruction is subject to a "conscience clause," and can only be given at the beginning or end of school.
3. The head teacher must be certificated.
4. The schools are annually examined and reported on by a Government inspector, who may also visit any school at any time.
5. A money grant is made by Government to the schools approved of by the inspectors; such grant being assessed according to merit and to the number of "passes" obtained. The chief differences are:—
1. In the management, as stated above;
2. Whereas the board schools are subsidised by the rates, voluntary schools require to be aided by voluntary subscriptions. In 1884 there were 14,580 voluntary schools in England and Wales, with an average attendance of

2,157,292,* or more than a million over that of 1870, and nearly double that of board schools (1,115,832). The cost per scholar in voluntary schools was £1 15s. 2d. as against £2 1s. 8½d. in board schools; and the grant earned was 16s. 4½d. as against 17s. 1d. Each scholar in board schools cost the rates 16s. 3d. In voluntary schools 6s. 8½d. per scholar had to be provided by voluntary subscriptions. The advocates of voluntary schools demand that they be put on an equal footing with board schools in respect of money payments.

Volunteer Fleet (Russian). When war seemed imminent between Russia and England in the spring of 1878, at a meeting of the Russian Society for the Promotion of Trade it was suggested that the cities of Russia should co-operate in the impending hostilities by helping to fit out armed steamers to prey on English shipping. The idea was enthusiastically entertained, and subscriptions poured in, and when the list closed in 1879 the total sum exceeded £400,000. Part of this money was spent in purchasing German steamers, which were afterwards fitted as cruisers, and sent to the Black Sea. Other vessels were ordered in France, and ultimately the fleet amounted to six cruisers, which number has been permanently maintained since, the ships lost or sold being replaced by others. One of the latest additions is the *Kinfauns Castle*, on which Mr. Gladstone took a cruise two or three years ago, and on which subsequently O'Donnell killed Carey, the Irish informer. After the Turkish war the Volunteer Fleet acted as transports to convey the Russian troops from Bulgaria, and later on were refitted as merchantmen, and employed to open up a direct trade between Odessa and the Chinese ports, the government assisting the enterprise with a subsidy. In 1885, instances of corruption having occurred in the management of the fund, and a collapse being imminent, the government stepped in, and placed the fleet under the formal control of the Admiralty, still, however, arranging that the vessels should act as merchantmen in time of peace.

Volunteers. The fourth division of the fighting strength of the United Kingdom and her colonies. The force, which at the present time numbers 254,038 officers and men, though of ancient date, was called into active existence in the year 1860, when fear of a French invasion caused the formation of several corps of men engaged in mercantile pursuits for the defence of the country. The members of the force receive no pay from government beyond the grant of thirty shillings for each efficient; can only be called upon to serve (unless they volunteer for foreign service) in the actual defence of their country; and until lately were without any official recognition. Now, however, the War Office appoints adjutants and instructors to the various regiments, and selects

officers to inspect and report upon the soldierly bearing and efficiency of the men; and require the officers of this auxiliary force to attend a school of instruction and pass an examination. Under the new system of "territorial" regiments, the various volunteer corps are affiliated to their respective line battalions, and adopt the same title and uniform (with some slight difference) as the regiments with whom they are associated. They are also encouraged to attend camps of instruction at the various military depots, where the men have the opportunity, at certain seasons of the year, of drilling and undergoing military discipline with the regular forces. The volunteer force includes the ordinary branches of the service: infantry, artillery, engineers, cavalry, etc. During the late Egyptian campaign, a detachment of the post office volunteers were attached to the regular army to conduct the postal and telegraph service, giving considerable satisfaction. While engaged with the active forces, the volunteers receive pay and allowances in the same proportion as their military colleagues. The Australian colonies furnished a contingent of men in the Suakin expedition. In India, quite recently, the volunteer movement has developed with considerable rapidity.

Voysey, The Rev. C. B.A. b. in London 1828; youngest son of Mr. Annesley Voysey, architect. Educated by private tuition, and at Stockwell grammar school, and St. Edmund Hall, Oxford. Took his degree in 1851. From 1852—59 he held the curacy of Hessle, near Hull, then that of Craighton, Jamaica; in 1861, that of Great Yarmouth, and in the same year that of St. Mark's, Whitechapel. Being ejected from this last curacy in consequence of a sermon against endless punishment, the Bishop of London (Dr. Tait, afterwards Archbishop of Canterbury) recommended him to the curacy of the well-known Victoria Dock parish, under the Rev. H. Boyd (now warden of Hertford College, Oxford). After six months' service he was invited by the patron and vicar of Healaugh to accept the curacy of that parish, and at the end of another six months the vicar resigned and presented Mr. Voysey to the benefice (1864). In 1865 he published the first volume of the *Sling and Stone*, which came out in monthly parts for four years. The opinions therein expressed excited the attention of the ultra-orthodox parties in the Church; and eventually, in 1869, legal proceedings were taken by the Archbishop of York's secretary against Mr. Voysey. The case was first heard in the Chancery Court, York Minster, 1869, when judgment was pronounced against Mr. Voysey, who thereupon appealed to the Privy Council in 1870. They confirmed the decision, and sentenced Mr. Voysey to be deprived of his living and to pay costs. Opportunity was given to Mr. Voysey to retract, but of this permission he declined to avail himself. In October 1871 he became minister of the Theistic Church; where with very few exceptions he has conducted the services weekly since that time.

Vulcan. See ASTRONOMY.

* Church of England, 1,607,823; Catholics, 167,841; Wesleyans, 128,584; British and others, 253,044.

W

Waddington, William Henry, French diplomatist, antiquary, and archaeologist, son of a naturalised Englishman, b. at Paris Dec. 11th, 1826. He received his education at Rugby, and Trinity College, Cambridge, where he took the second place in the first class of the Classical Tripos in 1849. He was also bracketed for the Chancellor's Medal. On coming of age M. Waddington was naturalised. His first political proclivities were for a constitutional monarchy, but these were afterwards modified in favour of the Republic, as embodied in the views of M. Thiers, by whom he was made Minister of Public Instruction (May 10th, 1873). He was returned to the Senate (1876) for the Department of the Aisne. He became Minister of Public Instruction in the cabinet of M. Jules Simon (1876-7), and was appointed Minister for Foreign Affairs (1877-9), under the Ministry of M. Dufaure. During this period of office he represented France with credit at the Congress of Berlin. In 1880 M. Waddington refused the London Embassy, but (July 1883) he succeeded M. Tissot at the Court of St. James's. M. Waddington is a member of the Society of Antiquaries of France, and of the Academy of Inscriptions and Belles Lettres. In 1881 he was elected an Honorary Fellow of Trinity College, Cambridge.

Wagner, Wilhelm Richard, the great composer and prophet of the "Music of the Future," b. at Leipzig 1813, and received his education in the university of that city and in Dresden. When twenty-three years of age he conducted the orchestra at the theatre of Magdeburg, and was engaged in musical work in the theatres of Königsberg, Dresden, Riga, and Paris. In 1841 he came to London, where he finished his first opera, "Rienzi." This was closely followed by the "Flying Dutchman." In 1843 he became musical director of the Dresden theatre. "Tannhäuser" appeared (1845), and "Lohengrin" (1850). At this time Wagner was in Switzerland, whither he had fled on the outbreak of political troubles in Saxony (1848). In 1855 he conducted the Philharmonic Society of London. At Venice he produced "Tristan and Isolde" (1859), and the "Meistersinger" (1867) at Munich. The group of four operas, called *Der Ring des Nibelungen* ("Rheingold," "Walküre," "Siegfried," and "Götterdämmerung"), appeared, the first parts in 1869, the whole group in 1876, at a theatre specially built for the purpose in Bayreuth by public subscription. His last work was "Parsifal" (1882). Wagner died at Venice Feb. 13th, 1883. He married as his second wife Cosima, daughter of Abbé Liszt. All Wagner's works except "Parsifal" were performed under Herr Richter, in London, 1882. His famous "Opfer und Drama," embodying his particular musical theories, appeared in 1850. "**Wagstaffe, Lancelot.**" See Noms DE PLUME.

Waldegrave, William Frederick Waldegrave, 9th Earl (creat. 1729); b. 1851; succeeded his grandfather 1859. Is Capt. London Rifle Brigade.

Wales, Albert Edward, H.R.H. Prince of, Prince of the United Kingdom of Great Britain & Ireland, Prince of Wales, Duke of Saxony, & of Saxe-Coburg and Gotha, Great

Steward of Scotland, Duke of Cornwall and Rothesay, Earl of Chester, Carrick, and Dublin, Baron Renfrew, and Lord of the Isles, K.G., K.T., K.P., G.C.B., G.C.S.I., G.C.M.G., P.C. Personal A.D.C. to Her Majesty, a field-marshal of the forces, col.-in-chief of 1st Life Guards, and Life Guards, and Royal Horse Guards, col. 10th Hussars, capt.-genl. of the Hon. Artillery Company, hon. col. of the Oxford and of the Cambridge University Corps, of the Middlesex Civil Service Corps of Rifle Volunteers, of the 3rd Batt. Gordon Highlanders, and of the Sutherland Highland Rifle Volunteers, hon. capt. of the Royal Naval Reserve, field-marshal in the German army, and col. of the Blücher Hussars (1883). Admitted to the Middle Temple, called to the bar and to the bench of that Society (October 31st, 1861). Educated at Christ Church, Oxford (D.C.L. 1868), and at Trin. Coll., Camb. (LL.D.), also LL.D. Dublin (1868), and Calcutta (1874). An Elder Brother of Trinity House; also Grand Master of the United Grand Lodge of Freemasons of England; President of the Society of Arts and of St. Bartholomew's Hospital. His Royal Highness was b. at Buckingham Palace, November 9th, 1841; created Prince of Wales and Earl of Chester, by patent under the Great Seal, December 4th, 1841; baptized at St. George's Chapel, Windsor Castle, January 25th, 1842; married there (March 10th, 1863) H.R.H. the Princess Alexandra Caroline Mary Charlotte Louisa Julia, eldest dau. of Christian IX., King of Denmark. In the winter of 1871 he was attacked with typhoid fever, which it was feared would prove fatal, but on recovery he attended a public thanksgiving in St. Paul's Cathedral, Feb. 27th, 1872. He proceeded to visit India (1877), and in company with the Princess also made a tour through Ireland (1885), where he met with a cordial reception, which brought into prominence the latent loyalty of the great mass of the Irish people. See ROYAL FAMILY (APPENDIX).

Walker, Mr. S., Q.C. Holds office in present Gladstone administration as Attorney-General for Ireland (Feb. 1886).

Wallace, Mr. Alfred R. See NATURAL SELECTION.

Walrond, Lieut.-Colonel William Hood, M.P., of Newcourt, Topsham, the eldest son of Sir John Walrond, was b. 1849. Educated at Eton. Held a captaincy in the Grenadier Guards, and is now lieutenant-colonel 1st Devon Rifle Volunteers. Colonel Walrond is Deputy Lieutenant and J.P. for Devonshire. Returned as Conservative member for East Devon (1880-85); North-East Devon (1885). Held office as a Junior Lord of the Treasury, and Junior Whip (1885).

Walsh, Dr. See ERRINGTON MISSION, THE.

Walsh, The Hon. Arthur Henry John, M.P., of Eywood, Titley, Herefordshire, eldest son of the second Baron Ormathwaite (1859). Is J.P. for Radnorshire, and an officer in the 1st Life Guards. Returned in the Conservative interest as member for Radnorshire (1885).

Walsingham, Thomas De Grey, 6th Baron (creat. 1780); b. 1843; succeeded his father 1871. Was a Lord-in-waiting to the Queen (Feb. 1874 to June 1875); M.P. for the Western division of Norfolk (July 1865 to Jan. 1871).

Walfisch Bay. See WEST AFRICAN BRITISH POSSESSIONS.

"Wanderer." See NOMS DE PLUME.

Wantage, Robert James Loyd-Lindsay, V.C., K.C.B., 1st Baron (creat. 1885); b. 1832; was aide-de-camp to Gen. Simpson in Russian war—present at battles of the Alma, Balaklava, and Inkerman, and at Sebastopol (Victoria Cross, medal with four clasps, Star of the Medjidie, and Grand Cross of the Legion of Honour); was Financial Sec. to War Office (1877-80), and M.P. for Berkshire (1865 till his elevation to the peerage).

"Ward, Artemus." See NOMS DE PLUME.

Wardle, Mr. Henry, M.P., of Highfield, Burton-on-Trent, was b. 1832, and is J.P. for Derbyshire. He is the senior partner in the firm of Messrs. Salt & Co., of Burton-on-Trent. Returned in the Liberal interest for South Derbyshire (1885).

Waring, Mr. Thomas, M.P., was b. 1828. Called to the Irish bar (1852). He is Deputy Lieutenant for county Down, and J.P. for the counties of Armagh and Down; High Sheriff for the latter county (1868). Late Lieut-Col. Commandant and Hon. Col. 5th Battn. (Militia) Royal Irish Rifles. Returned in the Conservative interest as member for North Down (1885).

Warmington, Mr. Charles Marshall, Q.C., M.P., was b. 1842. Educated at Univ. Coll. Sch., London. Called to the bar at the Middle Temple (1869). Was appointed Q.C. (1862). Returned in the Liberal interest as member for West Monmouthshire (1885).

Warnings, Storm. See METEOROLOGY.

Warren, Col. Sir Charles, R.E., K.C.M.G., son of Sir Chas. Warren, K.C.B., was b. 1840. Educated at Cheltenham, Sandhurst, and Woolwich. Lieutenant (1857). Captain (1869). One of the engineers employed in excavations at Jerusalem (1867-70), and has in consequence been known as "Temple" Warren. In 1876 and afterwards he was employed in various administrative and military capacities in Cape Colony. Made C.M.G. and Major (1878), and administered government in Griqualand West (1879-80). Boundary commissioner of Griqualand West (1881). Lieut.-col. (1882). Was employed to hunt out and bring to justice the murderers of Professor Palmer and his party (1883). In 1884-5 he was sent into Bechuanaland as High Commissioner, and restored tranquillity in that country without recourse to arms, and erected it into a British Protectorate. In recognition of his various services received the decoration of K.C.M.G. and the thanks of the Home and Colonial Governments (1885). Was appointed early in the present year (Jan. 16th, 1886) Governor of Suakim, which post he resigned on his appointment (March 17th, 1886) in succession to Sir E. Y. Henderson as Chief Commissioner of the Police.

"Warrior," The. See NAVY, BRITISH.

Warwick, George Guy Greville, 4th Earl of (creat. 1759); b. 1818; succeeded his father 1853. Was M.P. for South Warwickshire (Nov. 1845 to Aug. 1853).

Washington, Treaty of. See INTERNATIONAL ARBITRATION.

Wason, Mr. Eugene, M.P., was b. 1846. Educated at Rugby and Wadham Coll., Oxford. Called to the bar (1870). Connected with the firm of Messrs. Williams, James, and Wason, 62, Lincoln's Inn Fields, London. He is J.P. for co. Ayr. Returned in the Liberal interest as member for South Ayrshire (1885).

Waterford, John Henry De-la-Poer-Beresford, P.C., 5th Marq. of (creat. 1780); Baron Tyrone (1786), by which title he holds his seat in the House of Lords; b. 1844; succeeded his father 1866. Was M.P. for co. Waterford (July 1865 to Nov. 1866).

Watkin, Sir Edward William, Bart., M.P., of Rose Hill, Northenden, Cheshire, was b. 1819. Educated at Manchester. He is closely connected with the railway interest, being chairman of the South-Eastern and other railway companies. Is J.P. for Manchester, Kent, Lancashire, and Cheshire, of which latter county he was High Sheriff (1880), and Deputy Lieutenant for the Tower Hamlets. Returned in the Liberal (Independent) interest as member for Yarmouth (1857-58), Stockport (1864-68), Hythe (1874-85); re-elected 1885.

Watson, Mr. James, M.P., of Berwick House, Shropshire, was b. 1817. He is J.P. for Staffordshire, Salop, and Worcestershire. Returned in the Conservative interest as member for Shrewsbury (1885).

Watson, Mr. Thomas, M.P., of Horse Carrs, Rochdale; b. 1823, at Galgate, Lancashire, and was brought up in the silk-spinning industry. Removing to Rochdale, he established an extensive business, and is the inventor of imitation sealskin. Mr. Watson is chairman of the Rochdale School Board, and J.P. of the borough, to which he gave the new infirmary.

Watson, William Watson, P.C., LL.D., Baron (creat. 1880), son of the late Rev. Thomas Watson of Covington, Lanarkshire, b. 1828. Called to the Scottish bar (1851); Solicitor-general for Scotland (1874-6), and Lord Advocate (1876-80); M.P. for Glasgow and Aberdeen universities (1876-80), when he was appointed a Lord of Appeal in Ordinary with the dignity of a Baron for life.

Watt, Mr. Hugh, M.P., was b. 1846. Educated at Kilmarnock Academy and the Univ. of Geneva. Connected with the firm of Hugh Watt & Co., shipbrokers. Returned in the Liberal interest as member for Camlachie Div., Glasgow (1885).

Waveney, Robert Alexander Shafto Adair, F.R.S., 1st Baron (creat. 1872); b. 1811; succeeded his father in the baronetcy 1869. Was M.P. for Cambridge (1847-52, and Aug. 1854 to April 1857); was an unsuccessful candidate for Suffolk East in 1841, 1843, and 1859. This family is descended from the Fitzgeralds of Desmond. Died Feb. 15th, 1886.

Wax Chandlers, The Worshipful Company of. See CITY GUILDS, THE.

Wayman, Mr. Thomas, M.P., was b. 1833. He was Mayor of Halifax (1872-74). Is a Vice-President of the Halifax Chamber of Commerce, and a Governor of the Crossley Orphan Home. Returned in the Liberal interest as member for North Elland Div., West Riding (1885).

Way, Right of. A right of way may be defined as the right of passing over land not one's own. Rights of this kind are public, if enjoyed by everybody; private if enjoyed only by a certain person or description of persons. Wherever there is a public right of way there is a highway. The origin of a highway is in a dedication thereof by the owner to the public; and such dedication may be either express or implied. It will be implied from use of the highway by the public for a moderate number of years. But it is not generally known, and ought to be remembered, that the property in

the land occupied by a highway is usually in the owners of the land adjoining such highway. Should the highway have been legally closed, its area would again be at the discretion of the owner. A private right of way is either a customary right or an easement: a customary right if not annexed to the ownership or enjoyment of any particular tenement; an easement if so annexed (see EASEMENT). The customary right has its origin in long use; the easement either in long use (twenty years' enjoyment giving a qualified, and forty years' enjoyment an absolute right of way) or else in express grant by deed. Private rights of way are variously limited. The right to use a footway does not give a right to drive carts or cattle along it. The right to use a path for the purpose of going to church or market does not include the right to use it at all times or for all purposes. The right annexed to a tenement to use a way to that tenement cannot be enlarged merely because the tenement has been put to a totally new use. The obstruction of a public way constitutes a public nuisance, and is a ground of indictment; the obstruction of a private way is a disturbance, and is a ground for an action for damages. But if the obstruction of a public way occasions special loss to a particular person (*e.g.*, if, besides the inconvenience to which he is put, his horse or cart is injured) he has also an action for damages.

Weather Study. See METEOROLOGY.

Weavers, The Worshipful Company of. See CITY GUILDS, THE.

Webster, Sir Richard Everard, Q.C., M.P., was b. 1842. Educated at King's College, Charterhouse, and Trin. Coll., Cambridge. Called to the bar (1868), Q.C. (1878), Attorney-General (1885). Returned in the Conservative interest as member for Launceston (1885); Isle of Wight (1885).

"Welby, Horace." See NOMS DE PLUME.

Wellington, Henry Wellesley, 3rd Duke of (creat. 1814); b. 1846; succeeded his uncle 1884. M.P. for Andover (1874-80). The 1st Duke was the celebrated military commander, who was granted an allowance, with the title, of £2000 per annum for two lives.

Wells, Sir Mordaunt, d. Nov. 26th, 1885. He was called to the bar of the Middle Temple in 1841. In 1860 he was nominated by Lord Canning a member of the Legislative Council of India, in which capacity he took part in the preparation of the revised criminal code. In 1862 he was appointed a Judge of the High Court of Judicature.

Wemyss, Francis Charteris, 9th Earl of (creat. 1633); Baron Wemyss (1821), by which title he holds his seat in the House of Lords; b. 1818; succeeded his father 1883. Was a Lord of the Treasury (1853-55); M.P. for East Gloucestershire (1841-46), and for Haddingtonshire (1847-83). The 1st Earl of Wemyss, though raised to the peerage by Charles I., was engaged during the subsequent civil wars on the side of the parliament.

Wenlock, Belby Lawley, 3rd Baron (creat. 1839); b. 1849; succeeded his father 1880. Was M.P. for Chester (April to July 1880, when he was unseated on petition).

Wentworth, Ralph Gordon Noel Milbank, 12th Baron (creat. 1520), eldest surviving son and heir of the Earl of Lovelace, by his 1st wife, the only daughter of the celebrated Lord Byron; b. 1839; succeeded his brother 1862.

West, Mr. Henry Wyndham, Q.C., M.P., was b. 1823. Educated at Eton and Ch. Ch., Oxford. Called to the bar at the Inner Temple (1848). Q.C. (1868). Recorder of Scarborough (1858-65). Attorney-General of the Duchy of Lancaster (1861). J.P. for Lancashire. Returned in the Liberal interest as member for Ipswich (1868-74, 1883-85); re-elected 1885. Unseated on petition April 1st, 1886.

West, Major William Cornwallis, M.P., of Ruthin Castle, Ruthin, is the grandson of John, second Earl De la Warr, b. 1835. He is Lord Lieutenant of Denbighshire, and lieutenant-colonel of the 1st Volunteer Battalion Royal Welsh Fusiliers. Returned in the Liberal interest as member for West Denbighshire (1885).

Wesleyan Methodists are the followers of the Revs. John and Charles Wesley. John was born at Epworth on June 3rd, 1703, and Charles at the same place on December 18th, 1707. They were both educated and became tutors in the University of Oxford, at which place, in 1729, they began a strict religious movement which led to their being designated "Methodists," a name which was not new. In 1735 both the brothers went, under the direction of General Oglethorpe, to the new colony of Georgia, in South America, to be missionaries to the colonists and the Indians. They were then high churchmen of the strictest type. Their mission was a failure. They returned to England early in 1738, and in the May following, having been instructed by certain German Moravians, both the brothers were converted within four days of each other. They began a new course of life, and seeing the abounding wickedness all around them, they preached the new-found doctrine of justification by faith alone in all churches to which they had access; and when these were closed to them, they preached in the open air, first near Bristol, then in London, on both Moorfields and Kennington Common, where assemblies of from five to twenty thousand gathered to hear them, and hundreds of persons were converted. For about two years after their conversion they worked in harmony with the small Moravian church in Fetter Lane, London. In December, 1739, a few of Wesley's converts came to him asking for spiritual counsel, and he appointed a weekly meeting for them. The numbers who attended them increased rapidly, and in order that they might have a place of meeting large enough to hold their congregations, the old ruined foundry was taken in Moorfields (now Tabernacle Street), where the first Methodist society was organised. Their work prospered and spread; a society was formed at Bristol, and others at Kingswood, Bath, in Cornwall, and Newcastle-on-Tyne. Both the brothers Wesley began to itinerate over England and Wales; Scotland and Ireland were soon included in their journeys, each brother preaching every day, in or out of doors, in the places they visited; and societies were established in all the populous parts of the country. The Foundry was the central home of Methodism for nearly forty years; when it became unsafe. City Road Chapel was erected and opened 1778. The first Methodist chapel John Wesley built was in the Broadmead, Bristol, which still stands. John Wesley continued to form new societies to the end of his protracted life. Charles Wesley

at his death left some 6,500 hymns and sacred poems, some of which are sung in every Christian country. Charles Wesley died March 29th, 1788, aged 80; John Wesley died March 2nd, 1791, aged 87, leaving 61,463 persons as members of his Society in Great Britain, and 382 preachers. In 1797, owing to the expulsion of Alexander Kilham from the Methodist ministry, a new society was formed, which began with 5,000 members, and was denominated the "**Methodist New Connexion**." It has missions abroad, especially in China, and its total membership in January 1886 is 33,964, with 211 ministers. In 1811 another society was commenced, as the result of expelling from membership Hugh Bourne and William Clowes; they are called the "**Primitive Methodists**" (q.v.); they have foreign missions, and a membership of 192,389, with 1,042 ministers. In 1815, the "**Bible Christian Society**" was originated by the expulsion of William O'Bryan; they have a mission in Australia, a membership of 28,760, and 245 ministers. The **Methodist Free Churches** were formed out of members expelled from Methodism in 1828, 1835, and 1849, all of which amalgamated in 1857: they have foreign missions in Africa and Australia; their total membership is 84,653, with 419 ministers. There are also two other small societies, known as the "**Wesleyan Reform Union**," and the "**Independent Methodists**," their united membership being 13,975. The Methodists in Ireland number 25,633, with 236 ministers. All above enumerated are those who are members in society, not merely attendants at divine worship. In connection with British Methodism there are affiliated conferences in France, South Africa, West Indies, and Australia, and foreign missions belonging to the parent society, which together have a membership in 1886 of 1,012,545. The Wesleyans have four colleges for the training of ministers—one each at Richmond, Didsbury, Headingley, and Handsworth; and colleges at Sheffield, Cambridge, and Taunton of high class. There are also high-class schools at New Kingswood (Bath) for the sons of preachers, and at Southport for preachers' daughters; in addition to several proprietary colleges which are not connexional; also a Children's Home and Orphanage, in five or six branches, under the direction of the founder Dr. Thomas Bowman Stephenson. The Primitive Methodists have two colleges, and the New Connexion, Methodist Free Churches, and Bible Christians have one college each. Each of these societies has a "**book room**," from which are issued many thousands of hymn-books, magazines and other publications every year. John Wesley's cheap publications, in the last century, were the pioneers of good and cheap books for the English people. The greatest development of Methodism has been in the **United States of America**, where it is now the leading denomination, numerically and financially. Methodism began in New York by two Irish families in 1766, who had emigrated from the colony of Palatines; the original promoters were Barbara Heck and Philip Embury. The church which they founded in a rigging loft, in New York, is perpetuated in the old John Street Church in that city. In December 1784 it was organised by Dr. Thomas Coke as a Methodist Episcopal Church, who at that time ordained

or consecrated Francis Asbury its second bishop, Dr. Coke being the first. As an episcopal church, it has had a numerical prosperity which has surprised its own friends. In December 1884 the centenary of its organisation was celebrated, and its proceedings are recorded in a large octavo volume of more than 600 pages. Their churches and societies are now divided into North, South, and Coloured; the church North has a membership of 1,800,000, the church South has nearly 900,000 members, and the other branches are smaller. The following is a tabulated summary of the Methodists throughout the world, as represented by the official returns published immediately preceding January 1886:—

	Ministers.	Class Members.
<i>English Wesleyans in—</i>		
Great Britain	1947	444,024
Ireland	236	25,833
Foreign Missions	316	33,346
French Conference	34	1,797
South African Conference ...	169	31,652
West Indian Conference ...	85	45,124
Australian Conference ...	603	77,988
Methodist New Connexion ...	211	33,964
Primitive Methodists	1042	192,389
Bible Christians	245	28,760
Methodist Free Churches ...	419	84,653
Wesleyan Reform Union ...	15	8,771
Independent Methodists ...		5,144
<i>In United States of America—</i>		
Methodist Epis. Ch., North	12,811	1,799,610
Methodist Epis. Ch., South	4045	883,168
Methodist Protestant Church	1500	131,010
Evangelical Association ...	953	120,357
Primitive Methodist Church	27	3,878
American Wesleyan Church	267	23,805
Free Methodist Church ...	263	13,045
African Meth. Epis. Church	1882	400,804
African M. E. Zion Church	2000	302,750
Colored Meth. Epis. Church	638	125,683
Union American M. E. Ch....	40	3,040
Congregational Methodists	23	20,050
<i>In Canada—</i>		
Methodist Church in Canada	1628	170,762
British M. E. Ch. (Coloured)	45	2,120
Totals	32,701	5,174,037
Total Ministers and Members		5,206,738

These are duly accredited members of the Methodist Society, heads of families mostly. Take the low average that there are four adherents to Methodism for every member of society, we have a total of persons who attend Methodist worship constantly of 26,033,690, all of whom properly belong to Methodism.

Westbury, Richard Luttrell Pilkington Bethell, 3rd Baron (creat. 1861); b. 1852; succeeded his father 1875. The 1st Baron was successively Solicitor-General, Attorney-General, and Lord Chancellor.

Westbury Process. See ENGRAVING.

Westcott, Rev. B. F., D.D., Canon of Westminster and Regius Professor of Divinity at Cambridge; was b. 1825. Educated at Cambridge, where he graduated with honours. Assistant-master at Harrow (1852-69); Canon of Peterborough (1869); Regius Professor of

Divinity (1870); Canon of Westminster (1884). Canon Westcott is distinguished for his critical acumen, and, besides his well-known work on the Canon, is also known for his Commentaries on the "Gospel and Epistles of St. John," and his "Greek Testament," issued in conjunction with Dr. Hort.

West African Coast. Nearly the whole from Senegal to the Cape, has been partitioned among European powers. In the extreme north is the coast of Morocco, on which Spain holds four *presidios* or penal settlements—Ceuta, Melilla, Penon de Velez Island, and Alhucemas. Distant from the coast are the Azores and Madeira Islands, Portuguese; southward and nearer, the Canaries, Spanish. Then barren Saharan seaboard extends to Senegambia, off which are the Cape de Verde Islands, Portuguese. Senegambia comprises the basins of the Senegal and Gambia rivers. The Senegal is navigable 750 miles up, and is entirely in French hands; capital St. Louis, at its mouth. A road has recently been constructed from the upper Senegal to Bamaku, upon the upper Niger, whence trading vessels now run to Segou and Timbuktu, tapping the commerce of the western Soudan. A railway is being constructed, and there is a steamer on the upper Niger. Goree and Dakar Islands, near Cape de Verde, are also French. The Gambia river, capital Bathurst, is British (see WESTERN AFRICA, BRITISH POSSESSIONS). Southward are the rivers San Pedro, Casamance, Cacheo, Geba, Grande, Cassini, Nunez, Pongo, Sangareah, and Mallicory. Portugal has large claims here, and holds the Bissagos Island at the Geba mouth, with Bissao as a general capital; but her territories are intermixed with French ones, and there are also English, American, and native factories. Southward again are the British settlements of Sierra Leone and Sherbro, and next to them the Pepper or Grain Coast, where is the republic of Liberia, capital Monrovia. This was founded in 1822 by American philanthropists, and became a free republic in 1847. It was peopled by emancipated slaves. The experiment has proved a failure; the negroes have retrograded instead of progressing, and Liberia is a ludicrous caricature of a civilised state. Everything but the incapacity of the people is there to promote advance: rich soil, many products; but laziness, vice, and ignorance debase the country. Eastward is the country of the Kroos or Kroomen—the only West African race capable of work. They hire themselves out in gangs, and do all the labour along the West Coast. Yet at home they relapse into savagery. Further east is the Ivory Coast, low and sandy, dangerous climate, nominally under French government, but their forts of Assinie, Dabou and Grand Bassam have been abandoned. Next east is the Gold Coast (see WESTERN AFRICA, BRITISH POSSESSIONS), bounded eastward by the Volta river, the outlet for Ashanti. East of the Volta is the British station of Quitta. Here begins the Slave Coast, extending to the Niger delta—flat, broken by lagoons, unhealthy. A short distance from Quitta is the new German protectorate of Togoland (*q.v.*), with Great and Little Popo, and beyond it Whydah, the port of Dahomey. Next eastward is Ajuda, a Portuguese station; then Badagry, Lagos, Palma, and Leckie, forming a British territory. Inland are the great native states of Yoruba and Benin, conquered by Fulahs, partly Mohammedan, with large towns

such as Ibadan, pop. 150,000, and markets where the goods of the Soudan, Egypt, and Tripoli are exchanged for European articles. The Niger has 22 mouths, connected by many channels, best known being Brass, New Calabar, and Bonny rivers. Delta under British influence. Natives degraded, but large trade in oil. Steamers ascend the Niger some distance, but the people are hostile. The Niger is a free river; delta (under quasi British protection) exceptionally unhealthy. Eastward is Old Calabar river, the seat of some trade. Then Cameroon river and mountains, the latter rising to 13,500 feet, with active volcano. The Cameroons present the most likely place for European colonisation on the whole Guinea coast, and are now a German possession. In the Bight of Biafra is Fernando Po Island, belonging to Spain, used as a sanatorium; Princes Island and St. Thomas Island, Portuguese; and Annobon, claimed both by Spain, and Portugal. Sweden has lately acquired a station on the coast of the Bight. Southward, are Elobey and Corisco Islands, and a slice of coast, Spanish; and then French territory, begins at 1° N. latitude, as recently settled, by international arrangement, and extends down the coast to Massabé. Inland it comprises the basins of the Ogowe, Kwilu, and Gaboon rivers, with a portion of the right bank of the Congo, the region exploited by De Brazza (*q.v.*). Between Massabé and Cape Lombo is a small strip assigned to Portugal; then 23 miles of seaboard is secured to the Congo Free State (which see). The south bank of the Congo, as far as Nokki, 90 miles up, is given to Portugal, which holds the coast south of this, as far as Cape Frio, including the four provinces of Ambriz, Loanda or Angola, Benguela, and Mossamedes. Capital, St. Paul de Loanda. Other ports, Ambriz, Benguela, Mossamedes. Here, as in Mozambique, the Portuguese "blight" has existed nearly 400 years, over a country rich, populous, fertile, and healthy. From Cape Frio to the Orange river, Damara land and Great Namaqua land, now German territory, desert country, but rich in minerals. The inland limit is the 20th meridian longitude (see LUDERITZ-LAND). But Great Britain holds the only really good harbour on this coast—Walfisch Bay, acquired 1878—Penguin Island south of it. From the Orange river Cape Colony extends. The islands of Ascension and St. Helena, far out in the Atlantic, are also British.

Western Africa, British Possessions. Include the Gambia, Sierra Leone, the Gold Coast and Lagos, Walfisch Bay, and Cape Colony. Gambia river, navigable 300 miles up. Territories at mouth are St. Mary's Island, with capital Bathurst (pop. 6,138); Combo on south bank, Albrede, Barra, and Ceded Mile on north bank. Up river are several stations, of which McCarthy's Island, 187 miles from mouth, is the highest. Whole area, 21 sq. miles, pop. 105 whites, 14,045 negroes. First founded 1588. Ruled by administrator, who is subordinate to governor of Sierra Leone proper, styled Governor of West Africa Settlements. Revenue £28,866. Sierra Leone includes peninsula of that name, the Isles de St. Sherbro, and Mannah; whole area 600 sq. miles; pop. 271 whites, 60,000 negroes. Separated by 400 miles from Gambia. Capital, Freetown. First acquisition, 1787. Naval station and headquarters of West Indian Regiments.

originally used as a refuge for rescued slaves. Progress unsatisfactory. Ruled under the crown by a governor. Revenue, £73,096; expenditure, £82,259; debt, £50,000; imports, £64,000; exports, £377,000. Latter are palm-oil, palm kernels, bennie-seed, ground-nuts, cash-nuts, cocoa-nut, ginger, indiarubber, copal, resins, wax, a little ivory, teak, and gold-dust. Climate of Sierra Leone not so unhealthy as elsewhere on the coast. The **Gold Coast colony** consists of towns, forts, and stations, with a country around, styled the Protectorate; whole area, 16,620 square miles; pop. 400,000. Chief rivers the Pra and Volta. Forests separate from Ashanti, behind which rise Kong mountains. First settled 1672. Danish forts purchased 1850, Dutch in 1871. Three serious wars with Ashantis in 1824-7, 1863, 1873. After their final defeat and burning of Kumassi, the old Coast and **Lagos** were erected into a separate Crown colony, distinct from Gambia and Sierra Leone, with a governor and council since 1874. Capital, Accra; other ports, Axim, Kribia, Secondee, Elmina, Cape Coast Castle, Annamaboe, Winnebah, Addah, and Quitta. In the former the whites reside. Revenue, £106,647; expenditure, £99,289; imports, £515,398; exports, £594,136. The last chiefly palm-oil, gold, ivory, copal, monkey skins, and as from Sierra Leone. **Lagos** is an island on the coast of the Gulf of Benin, 150 miles east of Gold Coast, and together with Badagry, Palma, and Lekie the mainland, forms part of the colony, but its finances distinct. Acquired 1861. Revenue, £50,558; expenditure £37,879; imports, £33,659; exports, £460,000, consisting of palm-oil and above-mentioned; also camwood, indigo, and lead-ore. Area 73 square miles; pop. 100,000, whites, 75,000 blacks. Climate very unhealthy to Europeans. The Niger Delta is under British influence. **Walvisch Bay**, acquired 1878, is annexed to Cape Colony in 1884, is on the coast of Damara-land, 23° S. latitude. It is merely a harbour of refuge and a naval station. Penguin Island belongs to it. Further around, now the German colony of **Herzland** (*g.n.*), is barren and without water. **Orange river**, and south of it, is British territory (see **CAPE COLONY**). Consult Keith Johnston's "Africa."

Western Australia. A colony comprising the western half of Australia beyond the 115th meridian of E. long. It is 1,280 miles long S. to N., and 800 E. to W., including area of 7,250 sq. miles; pop. 30,000. Founded 1829 as **Swan River Settlement**. Till 1850 struggled for existence, having scanty population, no capital, and no market. Then made a convict station, till transportation ceased in 1861. Since, has been making slow advance, but not yet received responsible government. Ruled by governor and officials, and Legislative Council, eight official members, and sixteen elected on £10 suffrage for five years. Volunteer force of 575, and one torpedo-boat. **Settlement** almost entirely confined to S.W., though numerous tracts of rich grass recently discovered in N. now being taken up. Interior S.E. sterile, scrubby, salt marshes. South-west covered with immense forest of giant eucalyptus; jarrah, kari, tuart, and sandalwood especially valuable for export. Many rivers: Swan, Fitzroy, Glenelg, De Grey, Gascoigne, Murchison, etc.; but none navigable at all. **Divided** into various electoral districts; also twenty counties in S.W.

Land districts are Central, Eastern Central, South Eastern, Northern, and Kimberley. Capital Perth, pop. 8,000; other towns Albany, Fremantle, Geraldton, Roebourne, York, etc. There are 114 miles of railway, 700 of road, 2,285 of telegraph. Revenue, £290,319; expenditure £291,307; debt, £765,000. Imports, £521,167; exports, £405,693, consisting of timber, wool, lead, copper ore, whale-oil, guano, sandalwood, pearls, and pearl-shell. (Consult Nicolay's "Handbook for Western Australia," Gordon and Gotch's "Australian Handbook," Forrest's "Explorations in Australia," Giles' "Geographic Travels in Central Australia," etc.) Education compulsory; fees low; schools are both assisted and elementary. **Resources** of the colony enormous, but undeveloped as yet. Lead and copper are worked; gold, tin, zinc, and iron exist. Forest wealth incalculably vast. Pearl fisheries rising in value. The **Kimberley** and northern districts contain boundless pastures, and much land suitable for sugar, tobacco, wheat, etc. In other parts are regions and climates admirably suited for silk-growing, vintage, olive, etc. Only capital and labour required to raise Western Australia to a position equal to the eastern colonies. Should possess more attraction for immigrants than has hitherto been the case.

Westlake, Mr. John, Q.C., M.P., was b. at Lostwithiel 1830. Educated at Trin. Coll., Cambridge, Fellow (1851). Called to the bar at Lincoln's Inn (1854), he was appointed Q.C. (1874). Returned in the Liberal interest as member for Romford Division, South Essex (1885).

Westley, Mr. See **EGYPTOLOGY**.

Westminster Assembly, The, is the name given to the assembly of Puritan ministers and laymen (about sixty in all) convoked by order of the Long Parliament in 1643, to consider the then condition of the Church. It had no direct authority, and depended almost entirely on the parliament which had summoned it; but it included many prominent Presbyterians (Henderson, Baillie and others), a party of "Erastians" (Selden the lawyer, St. John, Whitelocke, etc.), and several Independents (Vane, Rye, Bridge, Goodwin, Burroughs, and Simpson). They took the Solemn League and Covenant, and ultimately drew up a "Directory of Public Worship," to replace the "Book of Common Prayer," and the celebrated "Westminster Confession of Faith," with a Longer and Shorter Catechism, the former of which was adopted by the Scotch Presbyterians. In 1647 the Scots retired from the Assembly, which gradually fell away until Cromwell's dissolution of the Rump (1652), when it disappeared altogether.

Westminster, Hugh Lupus Grosvenor, K.G., P.C., 1st Duke of (creat. 1874); b. 1825; succeeded his father 1869. Was M.P. for Chester (1847-69). An aide-de-camp (volunteer to the Queen 1881); was Master of the Horse to the Queen (May 1880 to June 1885). The 1st Earl was 20th in descent from Gilbert le Grosvenour, who accompanied William the Conqueror to England.

"Westminster Review" (quarterly, 6s.) was founded (1824) under that title, changed (1825) to the *London Review*, then named the *London and Westminster Review* (1886); on commencing a new series in its present form, (1852) reverted to its original title. The *Westminster Review*

treats of political and social subjects, and has long maintained a philosophical high-class reputation. Amongst its contributors have been Mr. John Stuart Mill and Mr. Herbert Spencer.

Westmorland, Francis William Henry Fane, C.B., 12th Earl of (creat. 1624); b. 1825; succeeded his father 1859. Served in the Punjab campaign of 1846, and has received a medal for Goojerat; aide-de-camp to the Governor-General of India (1848); aide-de-camp to Lord Raglan in the expedition to Turkey (1854), and to the Duke of Cambridge when made Commander-in-chief (1856). The 11th Earl was a distinguished diplomatist.

Weston, Mr. Joseph Dodge, M.P., was b. at Bristol, 1822. Chairman of the Patent Nut and Bolt Co., and initiated the Bristol Waggon Works Co. J.P. for Bristol. Mayor (1880-84). Returned in the Liberal interest as member for South Bristol (1885).

Wharnclyffe, Edward Montagu Granville-Montagu-Stuart-Wortley-Mackenzie, 1st Earl (creat. 1876); b. 1827; succeeded his father 1855. This family is a branch of the Stuarts, Earls and Marquises of Bute, springing from the 3rd Earl of Bute.

Wheat, Imports of. See TRADE OF 1885.

Wheatstone, Automatic. See POSTAL TELEGRAPH DEPARTMENT.

Wheelwrights, The Worshipful Company of. See CITY GUILDS, THE.

Whigs. See POLITICAL PARTIES (ENGLISH).

Whitbread, Mr. Samuel, M.P., is son of the late Mr. Samuel Charles Whitbread, formerly M.P. for Middlesex, and grandson of the celebrated politician. He was b. 1830, educated at Rugby, and Trinity College, Cambridge. He entered parliament in the Liberal interest as member for Bedford (1852-85). Re-elected 1885. He held office as Lord of the Admiralty (1859-63), and is a Deputy-Lieutenant and J.P. for Bedfordshire. Married (1855), Lady Isabella, daughter of the third Earl of Chichester.

"White, Babington." See NOMS DE PLUME.

White Books. See BLUE BOOKS.

Whiteboys. See POLITICAL PARTIES (ENGLISH).

"Whitefeather, Barabas." See NOMS DE PLUME.

White, Mr. John Bazley, jun., M.P., of Wilmington, Kent, was b. 1847. Educated at Blackheath Proprietary School. Is a director of John Bazley White Brothers (Limited). Returned in the Conservative interest as member for Gravesend (1885).

White, Sir William Arthur, K.C.M.G., son of the late Mr. Arthur White, of the Consular and Colonial Service, was b. 1824. Educated in the Isle of Man, and at Trinity College, Cambridge. Was clerk in the Consulate-General at Warsaw (1857-60), Vice-Consul (1861-4), Consul at Dantzic (1864-75); frequently acted as Consul-General in Poland; he was Agent and Consul-General in Serbia (1875-8); at Bucharest, the capital of Roumania (1878-9), being summoned to Constantinople as Envoy Extraordinary and Minister Plenipotentiary during the Conference (1876-7). Created C.B. (1878). When the Earl of Dufferin, after brilliant diplomatic successes at the Turkish capital (*q.v.*), was appointed to the Viceroyalty of India, Sir Edward Thornton was instructed to proceed to Constantinople to succeed him. In the early months of 1885, however, when the transfer was about to be made, the difficulties

with Russia in reference to the Afghan Boundary dispute (*q.v.*) arose, and Sir E. Thornton, who was ambassador at St. Petersburg, remained there. In the meantime Mr. White proceeded to the Turkish capital as *chargé d'affaires*, where he arrived April 2nd 1885. On September 18th the "bloodless revolution" in the Balkans, whereby Eastern Roumelia joined itself to Bulgaria, took place to be followed, however, by the sudden attack on the latter country by Serbia, November 14th. During the whole of this time the *chargé d'affaires*, now Sir William White, occupied an arduous position at Constantinople, the extreme gravity of current affairs and the supposed intriguing of both Austria and Russia rendering his duties particularly onerous. The crisis developing many complicated features, Sir W. White retained the post until Sir E. Thornton could take up his new appointment, having been succeeded at St. Petersburg. He was created (Jan. 20th 1886 K.C.M.G. It is reported (*Times*, April 8th) that Sir William White is shortly about to return to England to receive the thanks of the Foreign Office and her Majesty for his distinguished services as special envoy during the negotiations just concluded at Constantinople.

White-line Etching Process, Brice's. See ENGRAVING, AUTOMATIC.

White Slave Trade, The, is the term commonly applied to the foreign traffic in British girls for the vilest purposes. This organised system of decoying and kidnapping was brought to light in the London press in Jan. 1880 by Mr. Alfred S. Dyer, a member of the Society of Friends. His allegations being at the time denied by prominent officials in Brussels and elsewhere, he visited Belgium with Mr. George Gillett, a London banker, in Feb. 1880, and substantiated the fact of the traffic, receiving several of the rescued victims into his own house. A committee was then formed in London to press upon the British Government the importance of taking immediate steps to suppress this infamous business. Of this committee, the Chamberlain of London (Benjamin Scott, Esq., F.R.A.S.), became chairman. At his request, after some delay, the Government first sent Mr. Snagge (now a county court judge) abroad to investigate the matter, and subsequently appointed a Lords' Committee of Inquiry. Upon the report of that Committee the first Criminal Law Amendment Bill was framed; but notwithstanding the urgent entreaties of the before-mentioned London committee, no substantial progress was made with that bill during three sessions. Under pressure of public agitation, the Criminal Law Amendment Bill (*q.v.*) became law last session (1885). That Act, however, is only regarded as an instalment of what is required. The London committee also demand diplomatic action on the part of our Government to secure from Continental Governments the prohibition of the entrance of British girls into Continental licensed houses of infamy.

Whitley, Mr. Edward, M.P., was b. 1846. Educated at Rugby, and became a solicitor (1849). Has been member of the Liverpool Council since 1866, President of the Liverpool Law Society (1877-8). Is a J.P. for Liverpool, and was Mayor (1868). Returned in the Conservative interest as member for Liverpool (1880-5), re-elected (1885).

Whittier, John Greenleaf, b. 1807, at Haverhill, Massachusetts, U.S.A. He received his education at the common school, and was employed on a farm in his boyhood. When eighteen years old he began to write verses for the *Haverhill Gazette*: spent two years at Haverhill Academy. In 1829 he became editor of the *American Manufacturer*, a Boston newspaper; afterwards succeeded S. D. Prentice as editor of *New England Weekly Review*; returned to Haverhill in 1831, and engaged in farming; till continued to edit the *Gazette*; entered the Legislature of Massachusetts in 1835; became secretary of the American Anti-Slavery Society in 1836, at Philadelphia; edited *Pennsylvania Freeman* in 1838-39, when his office was sacked and burnt by a mob; returned to his native state (1840), and became correspondent of the *National Era*, an anti-slavery paper published at Washington in 1847; contributed anti-slavery and other lyrics to this paper, and has lived for years in literary retirement, publishing some volumes of poems, which have given him a prominent place among American authors. The best edition of his poems is the "Centennial Edition," published in 1876. His prose writings are: "Legends of New England" (1831), "Justice and Expediency, or Slavery considered with a View to its Abolition" (1833), "Supernaturalism in New England" (1847), "Old Portraits and Modern Sketches" (1850), and "Literary Sketches" (1854), etc.

Whitworth Gun. See ARTILLERY.

Wick Burghs. See CROFTERS.

Widows' Fund, Scottish. See FIRE AND LIFE INSURANCE.

Wigan, Baron. See CRAWFORD.

Wiggin, Mr. Henry, M.P., was b. 1824. He is Deputy Lieutenant for Staffordshire and J.P. for Worcestershire, Staffordshire, and the Borough of Birmingham. He is a Director of the Midland Railway Co. and South Staffordshire Waterworks Co. Governor of King Edward's School, Birmingham. Returned in the Liberal interest as member for East Staffordshire (1880-85); Handsworth Division (1885).

Wild Birds Protection Act (1880). This act prohibits the taking or killing of any wild bird between the 1st of March and the 1st of August in each year, and the having or exposing for sale any wild bird so killed or taken after the 15th of March (and before the 1st of August) in each year. If the wild bird be one of those named in the schedule the penalty is a fine of £1 for every bird in respect of which the offence is committed; if it be not one of those named therein the penalty is, for the first offence, the payment of costs, and for every subsequent offence a fine of 5s. for every bird in respect of which the offence is committed. The penalties are recoverable summarily. An offender refusing to give his name and address becomes liable to an additional penalty of 10s. But an owner or occupier of land may at any time take or kill thereon any wild bird; and a person authorised by owner or occupier may at any time take or kill any wild bird not named in the schedule. The schedule comprises upwards of eighty species.

"Wilde, Die." See GERMAN POLITICAL ARTICLES.

Will and Codicil. A will is an instrument disposing of property, as from the death of

the owner. In order to be valid in English law a will must be in writing, and signed at the foot or end thereof by the testator, or by some other person in his presence and by his direction; such signature to be made or acknowledged by the testator in the presence of two or more witnesses present at the same time. The witnesses must attest and subscribe the will in the presence of the testator. If any beneficial interest whatsoever is given by the will to any one of the witnesses, or to the wife or husband of such witness, the witness is none the less good; but the gift of the beneficial interest is void. Creditors are admissible witnesses. A will is revoked by subsequent marriage, or by the burning, tearing, or otherwise destroying the same by the testator, or in his presence and by his direction; or by writing executed in the same manner as a will and declaring an intention to revoke; or by a subsequent will executed in the same manner. A will speaks from the death of the testator without reference to the time of its execution. The Courts, in interpreting wills, have endeavoured to ascertain the testator's intention, without observing the same strict rules as are applied to the interpretation of other legal documents. The result has been an accumulation of rules and decisions which are extremely perplexing and defeat their own end. A will of real estate operates as a conveyance needing no further sanction. But if the real estate be situated in Middlesex or Yorkshire, a memorial of the will must be registered within six months of the testator's death if he dies in Great Britain, and within three years if he dies elsewhere. A will of personal estate must be proved; that is to say, the executors must deposit it in the Probate Division of the High Court, receiving a copy called the probate, which is the only proper evidence of the rights of the executors. The will is proved by the oath of the executor that he believes it to be what it purports to be; but in particular cases the evidence of one or of both of the attesting witnesses is necessary. A codicil (Lat. *codicillus*, dim. of *codex*=a book or writing) is a supplement to a will. The law relating to the execution, interpretation, etc., of codicils is in all respects the same as that which applies to wills. But a codicil, if it does not expressly revoke a will, will not be construed to do so.

Will, Mr. John Shirees, Q.C., M.P., was b. in the West Indies, 1841. Barrister of the Middle Temple; Q.C. (1883). Returned in the Liberal interest as member for Montrose Burghs (1885).

William I., Emperor of Germany, son of Frederick William III., King of Prussia, b. March 22nd, 1796. His military career dates from 1813, when he played a part in the War of Freedom. While governor of Pomerania (1848) the revolution broke out, and he had to fly to England. He became member of the Constituent Assembly sitting at Berlin (1848). He commanded the forces operating against the revolutionists in Baden. He was Regent of Prussia (1858-61), and came to the throne in 1861. Under the reign of Emperor William the war with Denmark added the duchies of Schleswig and Holstein to the kingdom of Prussia. Next followed the war with Austria, which ended at Sadova in favour of Prussia the feudal contest existing between the two nations as to which should be supreme

in Germany. The war was brought about through the diplomacy of Prince Bismarck, with the view to establish a North-German Confederation, under the leadership of Prussia, and an offensive and defensive treaty of alliance was concluded with Bavaria, Baden, and Württemberg. France saw with uneasiness the rising military power of Prussia, and the Emperor of the French, whose government was failing at home, endeavouring to restore his *prestige* by a bold stroke, entered upon the war with Germany (1870-71), resulting in the fall of the Empire, and the subjugation of France. The Prussian King besieged Paris, and forced it to surrender (armistice signed January 19th, 1871). After the signature of the treaty of peace (February, 1871), by which France lost the provinces of Alsace and Lorraine, and had to pay Germany an indemnity of £500,000,000, King William of Prussia was crowned as the first Emperor of Germany in the Hall of Mirrors in the Palace of Versailles. The life of Emperor William has been several times attempted. His ninetieth birthday (March 22nd, 1886), has been made the occasion of much congratulatory rejoicing in Germany.

William III., Prince of Orange-Nassau, Grand Duke of Luxemburg, King of the Netherlands (Holland), b. 1817. He succeeded his father, the late King William II., 1849. His mother, Queen Anne Pauline, was the sister of the late Czar Nicholas I. of Russia. During his reign King William has observed a strict neutrality in international complications, and therefore secured peace for his subjects. In politics he is Liberal, and he has done his best to mitigate the burdens of his people—generously reducing his civil list one-half. In 1827 he put an end to the Concordat with the Holy See. He married twice; his first wife being the Princess Sophia Frederica Matilda, daughter of William I., Duke of Württemberg. She died in 1877. He married, in 1879, the Princess Emma Adelaide Wilhelmina Theresa, daughter of Prince George Victor of Waldeck and Pyrmont, and sister of our own widowed Duchess of Albany. King William by his first wife had issue, Prince William Nicholas Alexander Charles Henry, born in 1853, died in 1879, and Prince William Alexander Charles Henry Frederick, Prince of Orange, born in 1857, who died at Paris June 21st, 1884. The heir apparent is Princess Wilhelmina, b. 1880.

Williams, Mr. Arthur John, M.P., of Morva, Eastbourne, was b. 1836. Called to the bar at the Inner Temple (1867). Is Secretary to the Accidents in Mines Commission, was formerly Hon. Secretary to the Law Amendment Society and the Legal Education Association. Returned in the Liberal interest as member for South Glamorganshire (1885).

Williams, Mr. John Carvell, M.P., was b. 1821. Secretary of the Liberation Society (1847), and Chairman of the Society's Parliamentary committee (1877). Returned in the Liberal interest as member for South Nottingham (1885).

Williams, Mr. Powell, M.P., was b. 1840. Appointed Chairman of the Birmingham Finance Committee (1879); elected Alderman (1883). He is a J.P. and Hon. Sec. of the Birmingham Liberal Assoc. and the National Liberal Federation. Returned in the Liberal interest as member for South Birmingham (1885).

Willoughby de Broke, Henry Verney, 10th Baron, (creat. 1492); b. 1844; succeeded his father 1862. The 1st Baron Willoughby de Broke received his peerage by writ of summons from Henry VII., for his services at the battle of Bosworth.

Wilson, Mr. Charles Henry, M.P. He is head of the shipping firm Wilson, Sons, & Co., late Sheriff of the town and county of Hull. Returned in the Liberal interest as member for Western Div. of Hull (1885).

Wilson, Mr. Henry Joseph, M.P., was b. 1833. Educated at Univ. Coll., London. Connected with the Sheffield Smelting Works. He is J.P. for the borough of Sheffield. Has been for some time Chairman of the Sheffield School Board. Returned in the Liberal interest as member for Holmfirth Division, Yorkshire (1885).

Wilson, Mr. Isaac, M.P., was b. at Kendal 1822. Conjointly with Mr. Edgar Gilkes, he established the Tees Engine Works (1884). One of the original members of the Tees Conservancy Commission. He was first Chairman of the Middlesbrough School Board, and is J.P. for the county. Returned in the Liberal interest as member for Middlesbrough (1885).

Wilson, Mr. John, M.P. Educated at the Edinburgh High School and University. He is J.P. of Edinburgh and Vice-President of the Edinburgh Chamber of Commerce. Returned in the Liberal interest as member for Central Division of Edinburgh (1885).

Wilson, Mr. John, M.P., was b. 1837, at Greatham, Durham. At an early age he began work at Stanhope Quarries, and at Ludworth Colliery, Durham. He was appointed secretary of the Durham Miners' Franchise Association (1876) and treasurer of the Miners' Association (1882), both of which offices he holds at the present time. Returned in the Liberal interest as member for Durham, Houghton-le-Spring Division (1885).

Wilson, Sir Mathew, M.P., B.A. (Oxon), was b. 1802. Educated at Harrow and Brasenose Coll., Oxford. He is a Deputy Lieutenant and J.P. for the West Riding, and J.P. for Lancashire. Returned in the Liberal interest as member for Clitheroe (1841), but unseated on petition; re-elected 1874-53; West Riding, Northern Division (1874-85); Skipton Division (1885).

Wilton, Arthur Edward Holland Grey Egerton, Earl of, of Wilton Castle, Hereford, Visct. Grey de Wilton, and Baron Grey de Radcliffe; d. Jan. 17th, 1885; was b. 1833. Educated at Eton and at Christ Church, Oxford. He sat in the House of Commons (1859 till 1865) for Weymouth, and (1873-4) for Bath. While he represented the latter constituency Lord Beaconsfield addressed to him the celebrated epistle in which he declared that Mr. Gladstone's Government had signalled their tenure of office by "plundering and blundering." Lord Grey de Wilton received, on the advice of Lord Beaconsfield, during his father's lifetime (1875) the honour of a peerage, being created in that year Lord Grey de Radcliffe.

Wilton, Seymour John Grey Egerton, 7th Earl of (creat. 1801); b. 1839; succeeded his brother 1885.

Wimbledon Meeting. A meeting held annually under canvas at Wimbledon, under the auspices of the National Rifle Association.

the encouragement of rifle shooting among volunteers. Various prizes are competed ; the principal event being the Queen's ze, value £250, with the badge of the Association, won in 1885 by Sergt. Bulmer, 2nd Vol. t., Lincoln.

Vimborne, Ivor Bertie Guest, 1st Baron eat. 1880), eldest son of the late Sir Josiah in Guest; b. 1835; succeeded his father in the onetcy 1852. The 1st baronet was an eminent n-master at Merthyr-Tydvil, and sat for rily 25 years in parliament.

Vimmera. See VICTORIA.

Vinchelsea. See CINQUE PORTS.

Vinchester, John Paulet, 14th Marq. of eat. 1551; b. 1801; succeeded his father 3; is Premier Marquis of England. The 1st rquis was one of the executors to the will of ng Henry VIII.; he filled the office of Lord gh Treasurer of England during the reigns Edward VI., Mary, and Elizabeth.

Vinchester, Right Rev. Edward Harold owne, D.D., 84th Bishop of (founded 636), a of Lieut.-Col. Robert Browne, of Morton use, Bucks; b. 1811. Educated at Eton and ammanuel Coll., Cambridge; created D.C.L. on. (1877); ordained (1836), priest (1837); son of Exeter (1857); appointed to the livings St. Sidwell, Exeter (1842); Kenwyn, Corn- ull (1850); Heavitree, Devon (1857); con- crated Bishop of Ely (1846); translated to this e (Aug. 1873).

Vinchelsea and Nottingham, George mes Finch-Hatton, 10th Earl of (creat. 18); b. 1815; succeeded his father 1858. Was .P. for Northamptonshire (1837-41); is here- tary lord of the manor of Wye.

Windhorst, Dr. Ludwig. The leader of the oman Catholic party in the parliament of ussia, b. in 1812. He studied at the Uni- versities of Göttingen, and Heidelberg. After ving filled several posts in the legal profes- sion, he became, in 1863, Minister of Justice nder the Hanoverian Government, being also member of the Hanoverian Estates of the ealm. In 1867 he entered the Prussian ulliament, and constituted himself the cham- ion of the Catholic Church of Germany. At e present time he occupies a prominent posi- on in the Reichstag.

Window Gardening is now an important ature in large towns, the houses of which e brightened by the summer displays e vari-coloured flowers, shrubs, and eepers. The windows of dwelling-houses e often fitted up with small conservatories, eans of which an uninterrupted suc- sion of bloom can be kept up all the year and. Perhaps in the Metropolis may be en the most varied phases of window gar- ening; luxuriant floral displays adorning ke palatial mansions and the meanest ouses. In the poorer districts of large ws was the widespread love of this branch of iculture may be traced to the exertions of e Birmingham Kyrie Society, which has for its ject the artistic decoration of the dwellings e poorer classes.

Windsor Forest. See FORESTRY.

Windsor, Robert George Windsor-Clive, aron (creat. 1592); b. 1857; succeeded his randmother 1869; she was declared by letters tent (Oct. 1854) to be Baroness Windsor, eing one of the co-heirs of the last peer of that ame, who was also 6th Earl of Plymouth.

Winmarleigh, John Wilson Patten, P.C., 1st Baron (creat. 1874); b. 1802; eldest son of the late Thomas Wilson Patten, of Bemton Hall, M.D. Was M.P. for Lancashire (1830), and sat for the northern division of that county (1832 until his elevation to the peerage); was Chief Secretary for Ireland (Sept. 1868 to December following).

Winn, The Hon. Rowland, M.P., was b. 1857, eldest son of Lord St. Oswald. Educated at Eton. Entered the Coldstream Guards (1879), with whom he served in the Soudan. Returned in the Conservative interest as member for Pontefract (1885).

"Winter, J. S." See NOMS DE PLUME.

Winterbotham, Mr. Arthur Brand, M.P., was b. 1830. Educated at Amersham Hall School, near Reading. Is a large woollen cloth manu- facturer at Cam, near Dursley, Gloucestershire, and J.P. for Gloucestershire. Returned in the Liberal interest as member for East Gloucester- shire (1885).

Winton, Earl of. See EGLINTON.

Wise, Mr. See BALLOONING.

Wo. See TOGO-LAND.

Wodehouse, Mr. Edmond E., M.P., only son of Sir Philip E. Wodehouse, G.C.S.I., K.C.B., was b. 1835. Educated at Eton and Balliol Coll., Oxford. Called to the bar at Lincoln's Inn (1861). Private Secretary to the Earl of Kim- berley (1864-66). Returned in the Liberal interest as member for Bath (1880-5); re-elected 1885.

Wolff, Sir Henry Drummond, P.C., K.C.B., son of the celebrated traveller Dr. Samuel Wolff, and Lady Georgiana Mary Wolff. He first entered into the public service—after quitting Rugby, where he was educated—under the auspices of Lord Palmerston, to whom he was introduced at the age of seventeen, and who gave him an appointment in the Foreign Office. After a service of five years in this office he was made attaché to the British Legation at Florence. Afterwards he was attached to the mission of the Earl of Westmorland; and was next appointed by the Earl of Malmes- bury to a post in the Foreign Office. Not long after he was transferred to the Colonial Office, under the auspices of Sir E. L. Bulwer (afterwards Lord Lytton), and sent to the Ionian Islands as secretary to the Lord High Commissioner. His services in this capacity were acknowledged in 1862 by his appoint- ment as K.C.M.G., when, on the cessation of the British protectorate over these islands, his services ceased. He first entered Parlia- ment in 1874, as member for Christchurch, and in 1880 was elected member for Portsmouth, for which borough he has continued to sit up to the present time. On his entry into parliament he showed an early capacity for dealing with foreign affairs, and in particular he gave valuable aid to the administration of Lord Beaconsfield in all matters relating to its Eastern policy, which led to his appointment, in 1875, as British High Commissioner for the delimitation and organisation of "Eastern Roumelia." In this new sphere Sir H. D. Wolff achieved a marked success. He was nominated a K.C.B. In parliament he took a prominent and authoritative part in all debates on the Eastern Question, including Egypt. His acquaintance with Egyptian and Turkish affairs led to his being sent (1885) by the Salisbury administration to Constantinople, as plenipotentiary for the settlement of the affairs

of Egypt, in accordance with the Ottoman Government. He has been very favourably received by the Sultan—who had made a certain acquaintance with him when engaged on his Eastern Roumelian mission—and also by the Ottoman Government, with which he appears to have come to an understanding regarding the affairs of Egypt; and proceeded to the latter country, accompanied by a commissioner of the Ottoman Government. He is at present engaged in inquiries as to the government and affairs of Egypt (March 1886). (See also EGYPT.)

Wolmer, Viscount, M.P., the eldest son of the Earl of Selborne, late Lord Chancellor, was b. 1859. Educated at Winchester and University Coll., Oxford, where he took a first-class in Modern History (1881). He was Private Secretary to Mr. Childers (1882-84), first at the War Office and then at the Treasury, and secretary to Lord Selborne (1884-85). Lord Wolmer is a captain in the 3rd Hampshire Regiment, and J.P. for Hampshire. Married (1883) Lady Beatrix Maud Cecil, eldest daughter of the Marquis of Salisbury. Returned in the Liberal interest as member for East Hants (1885).

Wolseley, General, K.P., G.C.B., G.C.M.G., 1st Visc. (creat. 1885); b. 1833 in county Dublin. Entered the army as an ensign in the 80th Regiment, in 1852. After going through the second Burmese war, in which he was wounded so severely as to necessitate his leaving for England, he was commissioned as a major in the 90th Foot. He served before Sebastopol, in the Crimean war, as Acting-Engineer, when he was again seriously wounded. Promoted, he was subsequently ordered to China, where, after attaining to a colonelship, he returned home. In 1867 he was sent, as deputy Quarter-Master General, to Canada, where trouble was apprehended in connection with the "Trent" affair. He successfully led the Red River expedition, and after serving as assistant Adjutant-General at home, in 1873-4 successfully conducted the Ashantee war. He bears a large number of medals and orders, and received the honour of knighthood in 1870. Sir Garnet Wolseley was appointed to administer the Government of Natal in 1875, and Cyprus in 1878. On his return from South Africa, he was (1880) appointed Quarter-Master General, Adjutant-General in 1882, and General the same year. In recognition of his services in Egypt he was created Baron Wolseley of Cairo (1885). His later Soudan campaign is fresh in the public mind (see EGYPT). Lord Wolseley has written a novel, and various military papers; and his "Soldier's Pocket-book" is well known.

Wolverton, George Grenfell Glyn, P.C., 2nd Baron (creat. 1869); b. 1824; succeeded his father 1873. Is a partner in the London banking firm of Glyn, Mills, Currie & Co.; was M.P. for Shaftesbury (April 1857 to July 1873); Secretary to the Treasury (Dec. 1868 to Aug. 1873); Paymaster-general (May 1880 to June 1885).

Women, Higher Education of. Prominent among the movements of the past fifteen years are: (1) The establishment of Girls' High Schools, which provide for girls an education like that of boys' grammar schools of the highest class. The admirable institutions, Cheltenham College and the North London Collegiate School for Girls, had prepared the way. In 1872 the Girls' Public Day School

Company was constituted, which now numbers thirty schools in London and the provinces. The school course includes Latin (and occasionally Greek), physical science, and religious instruction (entrusted to the head mistress), besides the ordinary subjects. The schools are officered by women. The pupils have been most successful at the local examinations, and the Oxford and Cambridge School Board examinations. The number of pupils in the Company's schools is at present 5,740; the fees range from three to five guineas per term. The chief promoters of the movement were Mrs. Grey, Miss Shirreff, Sir J. P. Kay-Shuttleworth, the Dowager Lady Stanley of Alderley, Miss Gurney, and C. S. Roundell, Esq., M.P. Besides the Company's schools, others have been established by various companies or similar lines—e.g., at Edgbaston, Glasgow, St. Andrews—and are doing similar work. Several endowed Grammar schools have opened branches for girls—e.g., the King Edward's School at Birmingham and the Bradford Grammar School. A "Church Schools Company" has been formed, and already established eight schools, in which, however, the average number of pupils is as yet small. By means of high schools a career is opened to women, and girls' education may be said to have passed out of the "dominie" stage. (2) The "higher" education is provided by the Universities of Cambridge, Oxford, and Manchester, and such collegiate institutions as University College, Bedford College and Queen's College in London, and the provincial colleges of Birmingham, Bristol, Dundee, Leeds, Liverpool, Nottingham, Sheffield, and the University Colleges of Wales (Aberystwith, Bangor, Cardiff). In 1866 Cambridge established the Higher Local Examination (at first confined to women), in compliance with a petition from the North of England Council for the Higher Education of Women (president, Mrs. Josephine Butler); in 1870 Hitchin College (since removed to Cambridge and called Girton College) was founded, and the Association for Women's Lectures at Cambridge commenced operations. In 1875 Newnham Hall was established, with about thirty pupils, under Miss Clough (principal); in 1880 the "North Hall," a branch of Newnham, was opened under Mrs. H. Sidgwick (now under Miss H. Gladstone), and in the same year the Lecture Association and Newnham Hall were united as Newnham College, an institution which now numbers 115 students. Oxford possesses two women's colleges: Somerville Hall, founded (principal, Miss Shaw-Lefevre), and Lady Margaret Hall, founded (principal, Miss Wordsworth). The first University to open its degrees (including medical degrees) to women was London (in 1878); Victoria followed suit, while Cambridge admitted women to the Tripos examinations in 1881, Oxford to most of its honour schools in 1884; but neither University grants at present the stamp of a degree. In University College, London, and the provincial colleges mentioned above, women are admitted to all classes on the same terms as men. The successes achieved by women students, both at London and Cambridge, are very remarkable. Nearly all Newnham students got honours, some the highest honours, hardly any fail altogether. The most recent creation is the Queen Margaret's College in Glasgow (principal, Miss Galloway); this day college carries on the work started by the Glasgow

Association for the Higher Education of Women, which had for many years arranged or lectures by the professors of Glasgow University. The "Holloway" College, about to be established at Egham, will further extend the facilities for University study. (3) The system of instruction by correspondence was inaugurated at Cambridge in 1870 by Miss Peile, and is conducted by means of fortnightly or monthly papers. Similar classes have been organised by Miss Macarthur in Glasgow, and also at Edinburgh, Oxford, and other places. The experiment has been usually very successful, and the classes number pupils in the colonies and India, as well as in remote parts of the United Kingdom.

Women's Rights. A term applied to the claims advanced on behalf of women who demand that their sex shall as far as possible be put on a footing of legal and social equality with men. The modern agitation for women's rights dates from the appearance of an article in the subject from the pen of the late Mr. John Stuart Mill in the *Westminster Review* 1851.—Women claim the right to vote at all political elections on the ground that, when householders, they pay rates and taxes, and therefore ought not to be denied a voice in deciding how local and imperial revenues should be spent. They claim on the principle that in England no person's property can be taken for purposes of government, without his consent. History teaches that no dependent class, or class of persons who are physically weak, can have their interests protected, or their rights safeguarded, unless they have political power. Where women have most power, there it is seen the law is most favourable to them. Abbesses and peeresses sat in the old Saxon parliaments, and the practice of women voting at elections in England fell into disuse partly through the violence of the times, partly because in an age when the privilege of voting came to be regarded as a burden, nobody cared to preserve it. Why, it is asked, retain a system of political privilege based merely on sex? Against the enfranchisement of women are many arguments. It is suggested that it would harden them and unfit them for family life. It has not done so where, as in England, they have municipal and parochial votes, and in Scotland where they vote equally with men in the government of nonconformist churches. It is urged that women are ignorant of politics. The answer is that the bulk of them are quite as intelligent as the bulk of the male voters; and it is a little anomalous that a woman—say of the capacity of the late George Eliot—should be deemed unfit to vote, whereas her footman would be fully enfranchised. A woman managing a farm with conspicuous ability cannot vote, while the most ignorant of her hands is entitled to the franchise. It is asserted that women really vote through their male relatives, but this implies the also principle of vicarious representation. It was on that principle that slaves were supposed to be adequately represented in the American house of representatives. That women might have to vote in scenes of violence is not a valid argument, since the ballot has rendered modern political elections peaceful. On other points women make claims to have the law altered in their favour. They desire to share with men all the educational endowments of the country—to enter suitable trades and professions on the same terms as

men—to change the laws of marriage and divorce, in the making of which they have no voice, and which, they contend, press with unequal severity upon women. In Scotland where women have always been more cared for by the law than in England, conjugal infidelity alone is held to be good ground for divorce on either side. In England it is a good ground for divorce against the woman, but it must be combined with cruelty, ere it is a good ground against the man. The advocates of Women's Rights would have the Scotch law enacted in England. As to the industrial rights of women, it may be said they affect the lower class chiefly. Working women have had all through life two implacable foes—the trades union, and the tyranny of unrestricted competition. The object of modern legislation has been to protect them against both. The middle classes are only beginning to send the women of their families into the professions, and the tendency of the age is to let women exercise a free and intelligent choice in the selection of their careers. The prevailing belief is that similarity of education, or employment, will never obliterate those radical distinctions of sex, which fit women and men alike, for their peculiar spheres in the scheme of life. Everything depends on the extent to which education can be trusted to develop and strengthen common sense both in men and women; and the verdict of society at present, as regards women, is that they should be gradually but cautiously educated, so as to be raised from a position of subordination, to one of equality with men. Already much has been done in this direction by the impetus which the Secondary Education Act of Mr. Forster in gave to the cause of the education of women, by establishing the principle that, wherever it was possible, endowments should be fairly divided between the sexes. The extension of the municipal franchise to women, and their election on school boards and boards of guardians, not to mention their admission to clerkships in the public service, have also done much to strengthen the agitation for Women's Rights. The bill for giving women the parliamentary franchise is now in the charge of Mr. Woodall, and is supported by most of the leading men of both political parties. (See list in Appendix of members of the new House in favour of Woman's Suffrage.) It was, however, in the year 1882 that the partisans of Women's Rights won their greatest victory in passing Mr. Osborne Morgan's Married Women's Property Act (*q.v.*) through both houses. This reform was initiated by Sir Erskine Perry, the late Mr. Russell Gurney, Recorder of London, and the late Mr. Hinde Palmer, *Q.C.* In the same year the municipal franchise in Scotland was extended from women in royal and parliamentary boroughs, to women in places constituted as boroughs under the *General Police and Improvement (Scotland) Act (1873)*. In 1868 London University admitted women to degrees, but excluded them from Convocation. In 1882 they were admitted to Convocation, but it is doubtful whether this gives them the right to vote at the election of a member of parliament for the University. In 1881 only 11 women were serving as poor law guardians in England; in 1882 there were 26; in 1884 women in Scotland were for the first time elected to the analogous office; and in 1884 as many as 44 women were serving as poor law guardians in England

alone. Ever since school boards were instituted it has been thought right in most localities to have a certain proportion of women chosen as members. Of late, however, their numbers on those boards seem to be slightly decreasing. In 1883 the *Victoria University, Manchester*, was opened fully to women. In 1884, Mr. Woodall (q.v.) attempted to force an amendment on the Reform Bill enfranchising women. It was, however, rejected by a vote of 2 to 1. In the same session Professor Bryce brought in his *Custody of Infants Bill*, providing that the parents shall be joint guardians of a child during life, and after death that the surviving parent shall be the guardian. It was ultimately rejected by the House of Lords. The *Devolution of Estates Bill* was also promoted in the same year by the partisans of Women's Rights. In cases of intestacy, women inherit sometimes two-thirds and sometimes only half what men do. The bill redressed this inequality. In 1884 the *University of Oxford*, following the example of *Cambridge*, gave greater publicity to its examinations for women, and by placing them in class lists with the male students, gave to their certificates of proficiency a much higher value. In *France*, ever since the days of Condorcet, who advocated the extension of the municipal franchise to women ("Lettres d'un bourgeois de New Haven à un citoyen de Virginie" 1789), able men have—with little effect, however—striven for Women's Rights. When the Revolution triumphed it grew cold to the women, who had helped on its cause. When the first Empire was proclaimed, Napoleon, who had an infinite contempt for women, forged for them the fetters of the Napoleonic Code. The Republic of 1848 raised hopes which the second Empire rudely shattered. Under the third Republic there seems to be a tendency to gradually loosen the bonds in which Frenchwomen have been held by the Napoleonic Code. The passing of a liberal *Divorce Law* in 1883 was a great step in advance. The only matter in which France has been liberal to women has been that of higher education. Everything approaching political power is denied to them. On the other hand, when married, the social freedom a Frenchwoman enjoys is practically unlimited. In *Germany* no attempt has been made to secure the franchise for women; but the *Leipzig Association of Advocates of Women's Rights* has had discussions on the subject, and the *Lette Society* at Berlin has been trying to improve the education and the industrial position of German women. It was on the model of the latter body that the *London Society for the Employment of Women* was formed. The German Reformers hold that education, and not the franchise, will emancipate women. In regard to primary instruction, German women, by the compulsory law, are in advance of most women of the lower orders in other nations. But as to the higher education of women, *Germany* is behind France, Italy, Sweden, and Russia. In *Holland* the educational advantages of women are very great, and the medical faculty encourage rather than oppose their admission to the practice of medicine. In the *Slavonic provinces of Austria* women have more political power than in any other country. They vote through a male proxy at municipal, provincial and national elections. As teachers in primary schools their pay is the same as that of men—but the educational facilities open to them are few and meagre. In *Austria Proper* there are

many normal high schools for women. In *Norway* the position of women is bad; but they can now practise as pharmacists, take degrees at the *University of Christiania*, and they have two reading rooms there set apart for their use. In *Spain* women are under great educational disadvantages; but four years ago certain trade and art schools were thrown open to women, and they were made eligible for university certificates. One Spanish woman has taken a medical diploma. In *Portugal* only 254,000 females can read and write. There is not a single secondary school for women in the country. In *Sweden* great attention has been paid to the education of women. In *Stockholm* alone there are eight high schools for girls. As early as 1846 the law established equal inheritance for sons and daughters. In 1870 the practice of medicine by women was legalised. Only four nations close their universities absolutely to women—*Germany, Austria, Bohemia, and Portugal*. In *Norway, Holland, Spain, Portugal, and Prussia*, women are not allowed to be telegraph clerks. A law similar to the *Married Women's Property Act* is in force in *Sweden, Switzerland, Russia, and Bohemia*. In five Continental countries—*Slavic Austria, Iceland, Russia, Italy, and Sweden*—women enjoy some political and municipal rights. In *Finland*, a Scandinavian province of *Russia*, the Governors of *Tavastehus* and *Viborg* have declared that every person, man or woman, who pays taxes ought to have a vote. In the *United States* the social position of women is higher and freer than in *England*, but they have not so much political power. They serve on juries in state courts. The laws relating to their domestic relations vary from the utmost stringency, to the utmost laxity in different States. They have pretty much the same position and status in those British colonies which are free from the old slave taint. The municipal vote has been conceded to women in *Ontario* and *Nova Scotia*, and the right of voting for school trustees has been given to them in *British Columbia*. In *Victoria* a good *Married Women's Property Bill* has been introduced, modelled on our own; and in *India* women have been introduced to very promising careers, as missionaries, physicians, and teachers. See ZENANA MISSION.

Won Sankwei. See CHINA.

Woodall, Mr. William, M.P., was b. 1832. He is a colliery proprietor at Burslem. Was a member of the Royal Commission on Technical Education. J.P. for Staffordshire. Returned in the Liberal interest as member for Stoke-on-Trent (1880-85); Hanley (1885). Holds office as Surveyor General of Ordnance (1886).

Woodcote Stakes. See RACING.

Woodhead, Mr. Joseph, M.P., of Huddersfield, was formerly a woollen manufacturer. He is now a newspaper proprietor. Returned in the Liberal interest as member for Speen Valley Division, West Riding, Yorks (1885).

Woodlining. See ENGRAVING, AUTOMATIC.

Wood's Hole. See BIOLOGICAL LABORATORIES (MARINE).

Woollen and Worsted Manufactures. Though the spinning and weaving of wool was long previously practised in *England*, the trade did not assume important dimensions till the Flemish refugees came over, and by their superior skill gave an impetus to that and other

branches of industry. This was in the reign of Queen Elizabeth; and before the death of that sovereign a considerable export trade in woollen goods had been established, in addition to supplying a rapidly increasing home demand. By the year 1700 our exports of woollen goods were valued at over £3,000,000 sterling per annum. In the course of the next century great progress was made by our textile manufactures generally, owing to the invention of improved spinning and weaving machines. The wool of English sheep has always been highly valued by the manufacturers, and five centuries ago the merchants of the Low Countries were eager purchasers of it. This having the effect of putting up the prices, the home manufacturers felt aggrieved, and an act was passed in the year 1337 forbidding the exportation of wool. Subsequently this law was relaxed somewhat; but between the years 1660 and 1824 there was absolute prohibition. The English manufacturers had early appreciated the excellent qualities of Spanish wool, and imported considerable quantities of that material; but when in 1765 the Elector of Saxony introduced the merino sheep into his dominion, he laid the foundation of a new and superior source of supply, on which we continue to draw to this day; the Saxon wool being held in high repute in the production of certain articles of clothing. In the year 1806 a single bale of wool reached England from Australia, but it was the harbinger of a new development of colonial enterprise which has achieved great things; for forty-five years later (in 1851) the Australian colonies sent us no less than 40,500,000 lb. of wool, and in 1885 the quantity was 356,000,000 lb. The British possessions in South Africa became an important source of supply about forty years ago; sending us in 1850 nearly 6,000,000 lb., in 1870 nearly 33,000,000 lb., and in 1885 nearly 47,000,000 lb. British India sends us between 20,000,000 and 30,000,000 lb. annually. Our total import of wool in 1885 was over 501,000,000 lb., of which about one-half is retained for home consumption. The quantity of wool grown at home has for twenty years past averaged about 150,000,000 lb. To complete the total of raw material of the woollen and worsted trades, we have to add 73,000,000 lb. of shoddy or rag wool. Of the wool grown and imported we exported in 1885 close upon £268,000,000 lb. in a raw state, while our exports of manufactured goods amounted in value to 18,846,767. Of the latter Germany took yarns to the value of £1,803,518, woollen fabrics to the value of £602,039, and worsted fabrics to the value of £147,213. France took yarns, £633,384; woollen fabrics, £1,183,940; and worsted fabrics, £901,114. Holland took yarns, £1,008,216; woollen fabrics, £294,840; and worsted fabrics, £268,314. The United States took: woollen fabrics, £866,049, and worsted fabrics, £1,838,380. Our own colonies are also extensive buyers in this trade. According to a recent return the woollen factories of the United Kingdom number 1,732, and give employment to 143,344 persons, of whom 64,280 are males, and 79,064 females. The number of spinning spindles is 3,337,607, of doubling spindles 318,154, and of power-looms 56,944. Of worsted factories there are 593, giving employment to 130,925 persons, of whom 49,773 are males, and 81,152 females. The number of spinning spindles is 2,096,800,

of doubling spindles 456,114, and of power-looms 87,393. The shoddy factories number 137, and give employment to 5,079 persons. They contain 90,000 spindles and 2,110 power looms. The factories are totalled as follows:—

	Woollen.	Worsted.	Shoddy.
England and Wales . .	1,412	636	134
Scotland . .	246	55	3
Ireland . .	74	2	0

Woolmen, The Worshipful Company of. See CITY GUILDS, THE.

Worcester, Right Rev. Henry Philpott, D.D., 102nd Bishop of (founded 679); b. at Chichester 1807; son of Richard Philpott, Esq. Educated at St. Catharine's Coll., Cambridge (senior wrangler and Smith's prizeman); elected a Fellow, and (1845) Master of his College and Canon Residentiary of Norwich; ordained deacon (1831), priest (1833); was subsequently chaplain to the late Prince Consort; consecrated to this see (1860).

Worcester Race Meeting. See RACING.

Wordsworth. See LAKE SCHOOL.

Workhouse System. See PAUPERISM.

Working Men's Clubs and Institutes.

The first regularly appointed "Working Men's Club" formed under that name was established by the Rev. E. Butcher Chatmer, vicar of St. Matthias, Salford, in 1858. Miss Adeline Cooper, with the aid of the Earl of Shaftesbury and other friends, opened the Duck Lane Working Men's Club in Westminster in 1860; and in 1861 Mrs. Bayley opened a Workmen's Hall in the Kensington Potteries. In 1862 the Working Men's Club and Institute Union was formed, with Lord Brougham as its president. The main difference between previous attempts to meet the wants of working men, and these clubs, was that in the latter recreation, refreshment and social intercourse were the essential features. A determined and not altogether unsuccessful effort from the first has been made, by the best friends of working men's clubs in all ranks, to make them in a subordinate degree instrumental in promoting education among their members; and hence the word "institute" has in many cases been connected with that of club. But the club movement, which as a national movement began in 1860-2, had its birth among temperance reformers, and was intended to supply the industrial classes with a counter-attraction to and a substitute for the public-house. This in its primary stages it failed permanently to do, except in a very few exceptional cases, where great popular and personal influence, as at Wisbeach, was brought to bear effectively. But the clubs never took root among the operative class until they could obtain any refreshments at them which they desired. The apprehensions felt on this score have proved groundless, and the cause of temperance has greatly gained by the formation of the social clubs where the members can get the drink they prefer without having to go to the public-house. Intemperance is never permitted in a *bona-fide* workmen's club. The Board of Inland Revenue and the Council of the

Club Union, with the concurrence of a former Chancellor of the Exchequer, have arranged clear and satisfactory rules for the protection of *bond-fide* clubs. When first started, working men's clubs were kept scrupulously free from all party political or sectarian elements. A common meeting ground was sought for men of all parties and sects. Many of them still adhere to this platform; but political clubs during the last ten or twelve years have multiplied in all directions with remarkable rapidity. Their first promoters affirmed as their *raison d'être* the necessity for promoting the political education of the people. In a large number of instances, especially in clubs formed by the operatives themselves, and not by candidates for parliamentary honours or their friends, this object is to some extent obtained, as in London and other large towns. But, although in probably a great majority of cases the Liberal or Conservative Club is the headquarters and recognised machinery for party political purposes, it differs from an ordinary working men's club only during electioneering activity, and perhaps in bringing together men of different social position more frequently. The political element has also been found to supply that element of brotherly fellowship and union, as at Wednesbury, which is so essential to the healthy life and vigour of a club, but which had been found fatally deficient when it was simply a social club without any sufficient bond of union between the members. In 1883 the Council of the Club issued a statement, from which it appeared that during the twenty years of its existence it had been instrumental in founding more than 1,000 clubs and institutes, having about 100,000 members. More than 500 of these are affiliated to the Society, and about 30 join it annually. More than 50 per cent. of the clubs are wholly self-supporting. It has a circulating library, which during the last ten years has lent to the affiliated clubs upwards of 50,000 volumes. It holds various meetings during the year for athletic sports, trophies and prizes being accorded. Money prizes for the best essays and answers in history examinations, and debating competition, are also given. The club movement has spread to Italy, Germany, Sweden, the United States, and Tasmania, and is now being introduced into France.

Working Men Representatives. See TRADES UNION.

Workmen's Compensation Bill, The. See TRADES UNION.

Workmen's Insurance Bill, The German. See GERMANY.

Worthingham, Baron. See GOSFORD.

Worms, Baron Henry de, M.P., son of the 1st Baron de Worms, was b. 1840. Educated at King's College, London; Fellow (1863); called to the bar of the Inner Temple (1863). Deputy Lieutenant and J.P. for Middlesex. Commissioner of the Royal Patriotic Fund. Returned in the Conservative interest as member for Greenwich (1880-85); Liverpool, East Toxteth Division (1885).

Worsley, The Rev. Thomas, D.D., Master of Downing Coll., d. Feb. 16th, 1885. The late Master was the senior of the Heads of Houses, having held the office of Master upwards of forty-eight years. He was b. 1798, and educated at Trin. Coll., Cambridge, of which he was a foundation scholar. He graduated in 1820, being third Senior Optime.

Wörth. See FRANCE.

Wragge, Mr. Clement L. See BEN NEVIS OBSERVATORY.

Wrangler. The title given to some thirty of the most successful competitors in the highest mathematical examination at Cambridge, answering to the first class in the final mathematical schools at Oxford; the men of the second class being styled senior optimes, and the third class junior optimes. The term wrangler (verb "to wrangle," used in its older sense, "to argue,") was adopted from the fact that the candidate used at one time to undergo *viva-voce* examination only. The student who heads the list is called "Senior Wrangler," the others being placed second, third, etc., according to merit. The examination, formerly held in January only, takes place twice in the year, the Tripos list being also issued in June.

Wreck Statistics. See APPENDIX.

Wright, Mr. See BALLOONING.

Wright, Mr. Caleb, M.P., of Lower Oak, Tyldesley, was b. 1810. Connected with the cotton industry. J.P. for Lancashire, and Chairman of the Tyldesley Local Board. Returned in the Liberal interest as member for Leigh Division of South-West Lancashire (1885).

Writers. See CIVIL SERVICE.

Written Law. See TALMUD.

Wrottesley, Arthur Wrottesley, 3rd Baron (creat. 1838); b. 1824; succeeded his father 1867. Was for many years a Lord-in-waiting to the Queen.

Wroughton, Mr. Philip, M.P., of Woolley Park, Wantage, was b. 1846, and was educated at Harrow and Christ Church, Oxford, where he graduated M.A. He is J.P. and Deputy-Lieutenant for Berks, and was formerly a major in the Royal Berks Yeomanry, and also High Sheriff. Mr. Wroughton has represented Berkshire in the Conservative interest since 1874, and at the late election was returned for North Berks.

Wynford, William Draper Mortimer Best, 3rd Baron (creat. 1829); b. 1826; succeeded his father 1869. The 1st peer, a distinguished judge, was directly descended in the female line from William Pitt (ancestor of the Earl of Chatham), and collaterally related to Sir William Draper, the opponent of Junius.

Wynn, Sir Watkin Williams, M.P. for Denbighshire, d. May 9th, 1885. He was b. May 22nd, 1832, and succeeded to the baronetcy on the death of his father (1840). Sir Watkin married his cousin, Miss Marie Emily Williams Wynn, daughter of the Right Hon. Sir Henry Williams Wynn, K.C.B., Her Majesty's Minister at the Court of Denmark.

Y

Yap. See CAROLINE ISLANDS.

Yarborough, Charles Alfred Worsley Anderson-Pelham, 4th Earl of (creat. 1837); b. 1859; succeeded his father 1875. This family is descended from an eminent military commander of the reign of Elizabeth.

Yarns and Te Exports of. See TRADE OF 1885.

Yellow Books. See BLUE BOOKS.

Yellow Stone Park. A large tract of country, embracing some thousands of acres, on the borders of Dakota and Montana territories U.S., chiefly noted for its "Geysers," or hot mineral springs, and its splendid scenery. A company has been formed, and is actively employed in laying out the grounds, erecting handsome buildings, and taking active means to ensure its popularity and success as a health resort, conducted on the basis of the German watering spas.

"Yendis, Sidney." See NOMS DE PLUME.

Yeo, Mr. Frank Ash, M.P., member of the firm of Cory, Yeo, and Co. Chairman of the Swansea Harbour Trustees, and J.P. for the borough of Swansea and county of Glamorgan. Returned in the Liberal interest as member for West Glamorgan (1885).

Yeomanry, Old English. See LAND QUESTION, THE.

Yolland, Colonel William, C.B., F.R.S., d. Sept. 4th, 1885. He was b. 1810, and obtained his commission in the Royal Engineers in 1828, and attained the rank of brevet colonel in the army in 1838. He was employed successively at the Ordnance Survey at the Tower of London, at Southampton, Dublin, and Enniskillen. He superintended the publication of astronomical observations, first those made with Ramsden's zenith sector, and afterwards with Airy's, the latter observations being for the purpose of determining the latitudes of various trigonometrical stations in Great Britain and Ireland. He also compiled an account of the measurement of the Loch Foyle base, which was made during the years 1827-29. In 1854 he was appointed one of the Inspectors of Railways under the Board of Trade. In 1856 he was selected as the engineer member of the Commission appointed to consider the best mode of reorganising the system of training officers of the scientific corps.

York August Meeting. See RACING.

York, Right Hon. and Most Rev. William Thomson, D.D., P.C., 86th Archbishop of (founded 625); b. 1819; son of John Thomson, Esq., of Whitehaven. Entered Queen's Coll., Oxford, as a foundation scholar, and was third class in Classics (1840); ordained (1842); became successively Fellow, Tutor, Dean, and Bursar of Queen's College (1847-55); Bampton Lecturer (1853); Select University Preacher (1856); Preacher at Lincoln's Inn (1858); Chaplain-in-ordinary to the Queen (1860); consecrated 30th Bishop of Gloucester and Bristol (1861), and translated to York (1862); is Primate of England.

Yorke, Mr. John Reginald, M.P., F.G.S., was b. 1836. Educated at Eton and Balliol Coll., Oxford. Is Deputy Lieutenant for Worcestershire,

J.P. for Gloucestershire. Returned in the Conservative interest as member for Tewkesbury (1864-68); East Gloucestershire (1872-85); North Gloucestershire (1885).

"Yorke, Oliver." See NOMS DE PLUME.

Yorkshire Penny Bank. One of the earliest of the penny banks, established at Leeds, May 1859, with the object of promoting the deposit in a bank of so small a sum as a single penny, and thereby encourage saving habits on the humblest scale. The idea took amazingly. In 1860 the Yorkshire Penny Bank had already fifty-eight branches opened, and the deposits had accumulated to nearly £80,000. The objects of this bank, which is in no sense a commercial undertaking for the sake of gain, are as follows:—(1) To receive deposits for safe custody and investment, the keeping and investing of the same, and the repaying the amount with interest to the depositors; (2) The doing of all such other lawful things as are incidental or conducive to the attainment of the above objects, or any of them. There are no dividends, bonuses, or divisible profits—all such being, indeed, prohibited in the Association's Board of Trade licence. Officially described, it is a Joint Stock Company, being limited by guarantee. The number of members acting as guarantors is upwards of one hundred. In 1877 the bank had a reserve fund invested in Government securities, amounting to more than £28,000, which had accrued from an accumulation of profits after all working expenses and interest on deposits had been cleared, added to the original subscriptions of the guarantors. The income thus derived is now the primary fund for paying salaries, rent and commission, and other expenses incurred in the carrying on of the business; current profits are only used to defray the balances of such expenses. The principal of the fund is as far as possible kept intact. Interest at the rate of 3 per cent. per annum is allowed on deposits of £1 and upwards which remain in the bank for the period of one calendar month or more; but no interest is allowed on smaller sums or on deposits of less than a month's duration. The head office is at 2, East Parade, Leeds; and the county is divided into thirty-nine districts, each having one or more branches. The total number now established amounts to more than 500. The managers of the branches give their services and time gratuitously, being actuated by motives of pure philanthropy. The whole of the extensive system is under the direction of a general manager, aided by a sub-manager and a staff of paid officials. The accounts are periodically thoroughly investigated and audited, and are presented to the annual general meeting of directors held at Leeds. The Yorkshire Penny Bank is simply a great mission formed for the purpose of inculcating thrift upon the poorer classes in the county of York—to which area, by its name and license too, its operations are confined; a latitude of ten miles beyond the county is, however, allowed.

Yorkshire Silk Industry. See SILK MANUFACTURES.

Young England Party. A band of young "old tory" aristocrats formed during the corn

law agitation, 1842-6. Their principle was that the ancient relation subsisting between rich and poor should be restored, that the rich should rule with benevolence and justice, and that the lower classes should revert to the feudal vassalage. Lord J. Manners and Hon. G. Smythe were the leading spirits in the movement, and Disraeli gave them his support. Harriet Martineau compares their demands with those of the Tractarians (*q.v.*), in another but similar direction ("History of the Peace," vol. ii. p. 520).

Young, Brigham. See MORMONISM.

Young, Mr. Charles Edward Baring, M.P., of Daylesford House, Worcestershire, was b. 1850. Educated at Eton and Trin. Coll., Cambridge. Called to the bar at the Inner Temple (1876). Returned in the Conservative interest as member for Christchurch, Hants (1880-85); re-elected 1885.

Young, James. See WASTE MATERIALS, UTILISATION OF.

Young, Dr. Thomas. See BIBLICAL ARCHAEOLOGY and EGYPTOLOGY.

Young, Sir William Alexander George, d. April 25th, 1885, at Accra, Gold Coast Colony. He was b. 1827. Mr. Young was present during the operations in the Baltic in the Russian war (1855-56). He was nominated Administrator of the Government of Vancouver Island (1866), and was afterwards successively Acting Colonial Secretary and Administrator of the Government of Jamaica, Government Secretary of British Guiana, Lieutenant-Governor of British Guiana, Administrator of the Government of Trinidad, and Acting Governor of the Gold Coast.

Yu Dynasty. See CHINA.

Yuena. See CHINA.

Z

"Zadkiel." See NOMS DE PLUME.

Zakaspie. See CENTRAL ASIA.

Zambesi and Shiré Rivers. The Zambesi is the largest of the African rivers flowing into the Indian Ocean. It rises in the Barot-se country, running south and then east, with a course of 1,500 miles. Its banks were the scene of Livingstone's earlier wanderings, and he discovered the famous *Victoria Falls*, more sublime than Niagara. Native traders descend to the Portuguese settlements on the lower river. South of the Zambesi lie the countries of *Monomotapa*, *Maashona*, and *Manica*, where are many ancient ruins, testifying to the presence of a civilised people. The most recent explorers seem to have found proof that these were Phœnician. Gold is said to be plentiful. The Shiré drains Nyassa and Shirwa lakes, falling into the Zambesi about 90 miles from the sea. There English enterprise is finding its way into Central Africa. Though navigation is broken by falls, there are steamers on the Shiré and Nyassa, and an increasing English settlement, whose trade already amounts to £200,000 per annum. (Consult a paper by H. E. O'Neill, in "Proceedings R. G. S.," July 1885.) These rivers form a natural waterway and means of access to vast populous regions, rich in gold, iron, ivory, and many native products. (See NYASSA, BLANTYRE, MOZAMBIQUE, AFRICAN EXPLORATION, etc.)

Zanzibar. A territory on the east coast of Africa. Consists of the island of Zanzibar, 55 by 25 miles, area 625 sq. miles; the isles of Pemba and Mafia, and the African coast from Warsheikh, 2° 30' N. lat., to Tungue, 10° S. lat., which is properly called the *Suaheli coast*. The authority of Zanzibar does not extend inland, however. It has recently (1885) been limited by the enforced cession to Germany of some degree of protection over the port and territory of *Dar-es-Salam*, south of Zanzibar, and over the territories of Unguru, Useguu, Usagara, and Ukami, inland of it. (See GERMAN COLONISATION.) Zanzibar was conquered in 1784 by the Imam of Muscat. It is

now independent, and is ruled by a sultan or seyyid. The present seyyid is *Bargash ben Saïd*, son of the Imam of Muscat, who succeeded in 1870. The islands are excessively fertile, producing cloves, rice, sugarcane, manioc, millet, cocoanut, oranges, etc. The estimated pop. of Zanzibar island alone is 300,000, composed of Arabs, intermixed with various East African races, Hindi and Malagasy traders, and numerous foreigners. Chief are the Arab land-holders and slave-employers. The capital, *Shanganny* or *Unguja*, has a population of 80,000, and is the emporium of a large trade. Caravans start to the interior and the Great Lakes from Mombasa, Pangani, Saadani, Bagamoyo, Dar-es-Salam (whence a road is being cut to Nyassa), and Quiloa. They carry arms, cotton, beads, and brass-wire, returning with gum-copal, cloves, ivory, wax, india-rubber, cocoanut oil, oil-seeds, etc., to value of £800,000, and over, annually. The slave-trade, nominally suppressed by treaty with the seyyid, is still carried on secretly. There is an army of some 1,200 men. Industries are chiefly the extraction of cocoanut oil, and, now, sugar-boiling. Of the rivers descending to the Suaheli coast, the Juba, Kingani, Wami, Lufiji, and Rovuma, are more or less navigable, the last two for many miles up. The commercial importance of Zanzibar has been recently increasing, and there is no doubt will now tend to progress vigorously. The whole coast is said to be capable of producing unlimited quantities of such valuable commodities as cloves, sugar, cocoa, coffee, nutmegs, cinnamon, Guinea pepper, sesame, indigo, cotton, tobacco, the oil-palm, etc. Cattle thrive well in some districts. European enterprise is becoming more and more engaged in this region, which, until the intrepid Stanley opened up the Congo river, was scarcely known to us except as the starting-place of explorers. (Consult report of Consul Kirk, in "Reports of H.M.'s Consuls," Part xiii., 1882; Keith Johnston's "Africa"; Thomson's and Stanley's various works, etc.)

Zebahr Pasha. See SOUDAN.

Zeila. See RED SEA LITTORAL.

Zenana. See ZENANA BIBLE AND MEDICAL MISSION.

Zenana Bible and Medical Mission, Indian Female Normal School and Instruction Society. In co-operation with the Church Missionary and other Protestant missionary societies in India. Founded 1852. The object of the Society is threefold: viz. (1) To send to the women of India the Gospel, by means of female missionaries; (2) To alleviate their sufferings in sickness, and minister to their spiritual need, through the agency of duly qualified lady medical missionaries; (3) To promote education, especially among the higher classes, based on Holy Scripture. It employs 30 European missionaries, 101 Eurasian and native assistants in schools and zenanas (that part of the house reserved exclusively for the women of families of good caste), and 47 Bible-women. It has mission stations at Allahabad, Benares, Bombay, Ferozepore, Fyzabad, Lahore, Lucknow, Madras, Nassick, Patna, and missionaries or Bible-women at about twenty small towns and outlying districts. The medical mission at Lucknow is under the superintendence of a duly qualified lady doctor, assisted by a trained lady nurse. Last year 1,919 new cases were treated at the dispensaries. The zenana missionaries have access to 750 private houses, with 986 zenana pupils under instruction. **Schools**—39 day schools, with 1,410 pupils; 5 normal schools, with 148 students training for mission work. There are 120,000,000 women in India, one-third of whom are computed to be shut up in zenanas. They can only be reached by means of female agents; and if they are not taught the Gospel by female missionaries they cannot be taught at all. Three ladies are at present studying at the London School of Medicine for Women, with a view of proceeding to India for medical mission work in connection with the Society as soon as they have fully qualified. The income of the Society in 1884 (last return) was £10,250. Offices, 2, Adelphi Terrace, W.C., and 1, Erskine Place, Edinburgh. Treasurers, Lord Kinnaird, and Sir William Muir, K.C.S.I., LL.D., D.C.L.

"Zeta." See NOMS DE PLUME.

"Zeta" (Graphic). See NOMS DE PLUME.

Zetland, Lawrance Dundas, 3rd Earl of (creat. 1838); b. 1844; succeeded his father 1873. Was M.P. for Richmond, Yorkshire (Nov. 1872 to May 1873), and a Lord-in-waiting to the Queen (May to Sept. 1880).

Zhob Valley Expedition. Undertaken (Sept. 1884) by a force of 4,000 troops from Quetta, under command of General Sir Oriel Tanner, to punish Shah Jehan, chief of the Zhob Valley Kakars, for attacks on English pickets and traders. The chief object, however, was to survey the Zhob valley, and ascertain whether it was possible to construct a short easy road through it from India to Candahar. The expedition was entirely successful. The people submitted in most of the country traversed, and after a short encounter near the stronghold of Shah Jehan, who took to flight, the entire tribe accepted our terms of peace. The Zhob valley, on examination, was found not to be suitable for the required road, but the adjoining Bori valley, nearer Quetta, answered the wishes of the Indian Government, and a military road is now being carried through it.

The expedition was further useful in proving the whole of this part of southern Afghanistan to be eminently capable of cultivation. In former times the Zhob and Bori valleys were densely populated, and under English rule they will doubtless recover much of their prosperity. The antiquated notion that a great mountain range, with only three passes, barred all intercourse between Afghanistan and India, is now pretty well exploded, but the Zhob survey still further increased the number of good routes—already amounting to nearly three hundred—which have been discovered of late years to exist between the two countries. As regards climate and soil the Zhob and surrounding districts constitute a second Caucasus, and there is very little doubt that they would form a splendid camping ground for the frontier garrisons at present located along the hot and enervating valley of the river Indus.

Zincography. See ENGRAVING, AUTOMATIC.

Zoan. See BIBLICAL ARCHÆOLOGY and EGYPTOLOGY.

Zola, Emile. Born April 2nd, 1840, in Paris. Educated at the Lycée St. Louis, in Paris, he began life at Messrs. Hachette's, the distinguished French publishing firm. He devoted much of his leisure to literary work, and soon appeared as a novelist in "Les Mystères de Marseille," and "Thérèse Raquin," exhibiting his remarkable power of critical analysis of human nature. "L'Assommoir," perhaps his most popular work, has gone through fifty editions. On the stage Zola has not had much success, but a dramatised version of "L'Assommoir" ran for two hundred nights, and an English adaptation, "Drink," had a great success. He is also the author of "Nana," "Pot Bouille," and many other works. As a critic, Zola has contributed much to the *Kolossal* and the *Figaro*. He is a writer of remarkable power and industry.

Zoology (*zoon*, animal, *logos*, science)—the study of animals. Often used as synonymous with only one branch of that study—viz. *classification*. The word zoology is now generally replaced by the term *Comparative Anatomy*. Using it as inclusive of both comparative anatomy and classification, we treat of (1) the most recent work in the former, (2) the newest and best system in the latter, (3) works of reference. (1) This has been along the lines of evolution, and has tended yet more completely to establish the great fact of evolution. One or two of the most important recent discoveries follow. (a) The *Infusoria* (*q.v.*) only reproduce asexually. (b) The *Sponges* are not protozoa, but low coelenterata (*v.i.*) (c) The *Ascidioda* or *Tunicata* represent the initial stage of the evolution of the vertebrata or back-boned animals from the invertebrata. They have a notochord or dorsal cord like that which marks in vertebrata the line of the backbone, and a perforated pharynx for respiration, like *amphioxus*, the lowest of the Pisces. (d) The study of the *lancelet* (*amphioxus*) has revealed how simple is the lowest type of vertebrata, and how intimately related to the ascidioda. (e) The history of the development of the visceral arches in vertebrata, and indeed all the details of the embryology of that sub-group. (f) The discovery of the egg of the ornithorhynchus (or duck-billed platypus), one of the lowest mammals, resembling in the production of its young, as in so many other

points, the allied class Aves. (a) *Classification of Gegenbauer*. The kingdom Animalia is divided into nine sub-kingdoms or *phyla* (*phylum*, a race). In this last word we have the keynote of modern classification struck. Classification is only the expression of the order of evolution. It attempts to give the pedigree of animals. **Phylum I.** Protozoa (first animals), *q.v.* **Classes**, Rhizopoda (root-footed)—examples, amoeba, foraminifera, Gregarina; (*greg*, a flock)—*ex. gregarina*; Infusoria (*q.v.*),—*ex. bell animalcule*. **Phylum II.** Coelenterata (hollow within). **Classes**, Porifera (hole bearers)—*ex. sponges*; Hydrozoa (water-animals)—*ex. hydra*, Portuguese man-of-war, medusæ; Actinozoa (sea-anemone animals)—*ex. sea anemone*, coral. **Phylum III.** Vermes (worms). **Classes**, Scolecida (*scolex*, worm)—*ex. tape-worm* and entozoa generally; Annelida (small ringed)—*ex. earthworm*; Chaetognatha (bristle-jawed)—*ex. sagitta*; Polyzoa (many animals, colonies)—*ex. sea-mat*. **Phylum IV.** Echinodermata (thorn-skinned). **Class**, Echinodermata, *ex. star fish*, sea-urchin. **Phylum V.** Brachiopoda (arm-footed). **Class**, Brachiopoda, *ex. terebratula*. **Phylum VI.** Arthropoda (joint-footed). **Classes**, Myriapoda (many-footed)—*ex. centipede*; Insecta, *ex. beetle*; Arachnida (*arachne*, spider)—*ex. spider*, scorpion; Crustacea—*ex. lobster*. **Phylum VII.** Tunicata or Ascidioida (bag-like animals). **Class**, Ascidioida—*ex. ascidia*. **Phylum VIII.** Mollusca (soft animals). **Classes**, Lamelli-branchiata (plate-gilled animals)—*ex. oyster*; Branchiogastropoda (stomach-footed animals breathing by gills)—*ex. limpet*; Pulmogasteropoda (stomach-footed animals breathing by lungs)—*ex. snail*; Pteropoda (wing-footed)—*ex. clio*; Cephalopoda (head-footed)—*ex. cuttlefish*. **Phylum IX.** Vertebrata (back-boned). **Classes**, Pisces (fishes)—*ex. herring*; Amphibia—*ex. frog*; Reptilia—*ex. snake*; Aves, *ex. fowl*; Mammalia—*ex. horse*. (3) *Gegenbauer's "Elements of Comparative Anatomy"* (translated by Bell); Huxley's "Manuals of the Invertebrata and Vertebrata"; Claus, "Elementary Text Book of Zoology"; Lankester, "Notes on Embryology and Classification"; Owen's "Vertebrata and Invertebrata."

Zouche, De la, Robert Nathaniel Cecil George Curzon, 15th Baron (creat. 1308), b. 1851; succeeded to the title 1873.

Zululand. A country in South Africa, situated to the north-east of Natal, from which it is separated by the river Tugela. Zululand is everywhere well watered and capable of cultivation, with a sea-board extending along some 140 miles. St. Lucia Bay, the best harbour, proclaimed British (1885), although capable of improvement, is full of shoals, and the adjoining country is very unhealthy. The land near

the coast is damp and hot, but suitable for sugar and other semi-tropical products. The interior is rugged and intersected with rapid rivers, but being high, is cooler, drier, and more healthy than the coast. The area of Zululand is estimated to be about 10,000 sq. miles; pop. probably 200,000. At the beginning of this century, Chaka, a Zulu chief, was exiled from his country, became acquainted with Europeans, and eventually returned to organise his people into an army on a European plan. He became master of the whole country between the Limpopo and Cape Colony, and ruled it despotically for twenty-five years. In 1838 his brother Dingaan succeeded him, but was deposed by the Boers, when they took possession of what is now Natal. Sundry of Chaka's generals became independent, forming kingdoms far to the north and west; and under Panda, the successor of Dingaan, the Zulu kingdom became reduced to the territory now called Zululand. In 1873 Panda was succeeded by Cetewayo, who reorganised the Zulu regiments (see CETEWAYO). There were old disputes with the Boers about land, and when the British annexed the Transvaal, Cetewayo became embroiled with the Colonial authorities. His attitude was such that war was declared against him. In 1879 British troops entered Zululand in three columns. The centre, under Lord Chelmsford, suffered a terrible reverse at Isandhlwana, where 1000 British troops were slain. In spite of the heroic defence of Rorke's Drift, it had to retreat. On the south Col. Pearson defeated a Zulu force, but was beleaguered in Etchowé for some months. On the north Sir Evelyn Wood suffered some reverses, but defeated the Zulus at Kambula Kop. Eventually reinforcements arrived, the Zulus were utterly overthrown at Ginghlova and Ulundi, and Cetewayo made prisoner. Zululand was then partitioned into thirteen chieftainships; but disorder soon ensued. In 1882 another experiment was tried: Cetewayo was restored to a part of the country, with a Native Reserve, under a British Resident, between him and Natal. But he was soon at war again, and was overthrown by the chief Usibepu, and obliged to fly to the Reserve, where he died. His territory is now ruled by his son Dinizulu, who has allowed Boers to appropriate large tracts of land, 3,000,000 acres, establish a republic, and offer for sale land near St. Lucia Bay, which is British territory—proceedings likely once more to bring them into collision with the Imperial Government. Meanwhile the Zulus are in a state of anarchy and semi-starvation, and it has been proposed to take the whole country under British protection, or annex it to Natal.

APPENDIX.

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Home Rule, Summary of Mr. Gladstone's		Russell, Rev. Lord, obituary notice of	563
new scheme of	562	United States, supplementary note to	566
Indian budget, estimates (1886-7)	566		

The Royal Family.		Born.	Died.	Married.	Date.	Annuities.
HER MAJESTY THE QUEEN, Succ. her uncle, WILLIAM IV., 1837		1819	.	Duke of Saxony, Prince of Coburg and Gotha.	1840	£385,000*
<i>Family:</i>						
1. VICTORIA ADELAIDE, PRINCESS		1840	.	Crown Pr. of Prus-	1858	£8,000
ROYAL. <i>Issue—</i>				sia.		
a. Frederick William A. V. (<i>Issue,</i>		1859	.	Pr. Augusta of	1881	
1 son.)				Holstein.		
b. V. E. A. Charlotte. (<i>Issue</i> 1 dau.)		1860	.	Pr. of Saxe-Meinin-	1878	
c. A. W. Hendrich		1862	.	gen.		
d. F. F. Sigismund		1864	1866			
e. F. W. A. Victoria		1866				
f. J. F. E. Waldemar		1868	1879			
g. Sophia Dorothea V. A.		1870				
h. Margaret B. F.		1872				
2. ALBERT EDWARD, PRINCE OF WALES		1841	.	Alexandra of Den-	1863	£40,000 (and
<i>Issue—</i>				mark.		£10,000 to wife.
a. Albert Victor C. E.		1864	.			Duchy of Corn-
b. George Frederick E. A.		1865	.			wall revenues
c. Louise Victoria A. D.		1867	.			about £65,000
d. Victoria Alex. O. M.		1868	.			ann.).
e. Maude Charlotte M. V.		1869	.			
f. Alexander J. C. A.		1871	1871			
3. ALICE MAUDE MARY		1843	1878	Pr. Fred. W. Lud-	1862	
<i>Issue—</i>				wig of Hesse-		
a. Victoria Alberta E. M. M. (<i>Issue,</i>		1863	.	Darmstadt.		
1 dau.)				Pr. Louis of Bat-	1884	
b. Elizabeth Alex. L. A.		1864	.	tenburg.		
c. Irene Marie L. A.		1866	.	Duke Sergius of	1884	
d. Ernest Louis C. A. W.		1868	.	Russia.		
e. Frederick William		1870	1873			
f. Victoria Alice		1872	.			
g. Mary Victoria		1874	1878			
4. ALFRED E. A., DUKE OF EDINBURGH		1844	.	Duch. Alex., sister	1874	£25,000.
<i>Issue—</i>				Emp. Russia.		
a. Alfred Alex. W. E. A.		1874	.			
b. Marie Alex. Victoria		1875	.			
c. Victoria Melita		1876	.			
d. Alex. Louise O. V.		1878	.			
e. Beatrice		1884	.			
5. HELENA, PRINCESS CHRISTIAN		1846	.	Pr. Fred. Christian	1866	£6,000.
<i>Issue—</i>				of Schles.-Holst.		
a. Christian Victor A. L. E. A. . . .		1867	.			
b. Albert John C. F. A. G.		1869	.			
c. Victoria Louise S. A. A. H. . . .		1870	.			
d. F. J. Louise Augusta M. C. . . .		1872	.			
e. Harold		1876	1876			
6. LOUISE C. A., MARCHIONESS OF		1848	.	Marq. of Lorne . .	1871	£6,000.
LORNE.						
7. ARTHUR W. P. A., DUKE OF CON-		1850	.	Pr. Louise, dau. of	1879	£25,000.
NAUGHT. <i>Issue—</i>				Pr. Fred. Chas.		
a. Margaret V. A. Ch. Norah		1882	.	of Prussia.		
b. Arthur F. Patrick A.		1883	.			
c. Infant daughter (March 18)		1886	.			
8. LEOPOLD G. D. A., DUKE OF ALBANY		1853	1884	Pr. Helena of Wal-	1882	£6,000.
<i>Issue—</i>				deck.		(to Duchess).
a. Alice Mary V. A. P.		1883	.			
b. Leop. C. E. G. A. (<i>posth.</i>)		1884	.			
9. BEATRICE M. V. F.		1857	.	Pr. Henry of Bat-	1885	£6,000.
				tenberg.		
1. DUKE OF CUMBERLAND (cousin to		1845	.	Pr. Thyra of Den-	1878	
the Queen).				mark.		
Five children.						
2. DUCHESS OF CAMBRIDGE		1797	.	Dke. of Cambridge	1818	£6,000.
<i>Issue—</i>						
a. George W. F. C., Duke of Cam-		1819	.	Morganatic . . .		£12,000.
bridge.						
b. Augusta C., Dch. of Mecklenburg-		1822	.	Fred. Dke. of Meck-	1843	£3,000.
Strelitz (son and grandchildren)				lenb.		
c. Mary Adelaide, Duchess of Teck .		1833	.	Francis, Duke of	1866	£5,000.
(One dau. and three sons.)				Teck.		

* i.e., Privy Purse, £60,000; household salaries, £131,260; household expenses, £172,500; Royal bounty, £13,200; Sundry items, £8,040.—£385,000. This does not represent Her Majesty's entire income and expenditure, which are partly supplemented by the Duchy of Lancaster revenues (ab. £45,000), cost of Royal residences (those wholly and partly occupied by the Queen, and those by pensioners), Royal yachts, escorts, freedom from taxes, etc., etc., and civil list of £24,072. The "Financial Reform Almanack" (Simpkin & Co., 1s.) contains a very complete statement of the costs of the Royal Family to the country.

Tenth Parliament of Her Majesty Queen Victoria.—The Cabinet.

. For New Ministry of 1886 see text.

Rt. Hon. Marquess of Salisbury	{	Premier and Secretary of State for Foreign Affairs.
Rt. Hon. Earl of Idlesleigh		First Lord of the Treasury.
Rt. Hon. Lord Halsbury		Lord High Chancellor.
Rt. Hon. Earl of Carnarvon		Lord Lieutenant of Ireland.
Rt. Hon. Viscount Cranbrook		Lord President of the Council.
Rt. Hon. Earl of Harrowby		Lord Privy Seal.
Rt. Hon. Sir Michael Hicks-Beach		Chancellor of the Exchequer.
Rt. Hon. Sir Richard A. Cross		Secretary of State, Home Department.
Rt. Hon. Col. Fred. A. Stanley		Secretary of State, Colonial Department.
Rt. Hon. W. H. Smith		Secretary of State, War Department.
Rt. Hon. Lord Randolph Churchill		Secretary of State, Indian Department.
Rt. Hon. Lord George Hamilton		First Lord of the Admiralty.
Rt. Hon. Duke of Richmond		President of the Board of Trade.
Rt. Hon. Lord J. G. Manners		Postmaster General.
Rt. Hon. Lord Ashbourne		Lord Chancellor of Ireland.
Rt. Hon. Edward Stanhope		Vice-President of the Council.

The General Election (from the *Times*).—**Complete List of Polls and Unopposed Returns.**—The subsequent bye-elections are given below, and the constituencies affected are denoted in the following list by a †.

ENGLAND AND WALES, 495 Members.

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Anglesey	1		8,750	*Davies, R. Pritchard, Rayner, Capt. G.	L. C.	4,412 3,462
Bedfordshire.	3	N. or Biggleswade Div. †Luton Div.	13,347 12,135	*Magniac, C. Barttelot, Capt. W. G. Flower, C.	L. C. C.	6,037 4,422 6,080
		Bedford (1)	3,134	Gedge, S. *Whitbread, S. De Ricci, J. H.	L. C. C.	3,871 1,588 1,286
Berkshire	5	N. or Abingdon Div. S. or Newbury Div. E. or Wokingham Div. Reading (1) Windsor (1)	8,700 10,377 9,259 7,517 2,296	*Wroughton, P. Purvis, R. Mount, W. G. Palmer, G. Russell, Sir G. Lawrence, E. Murdoch, C. T. *Shaw-Lefevre, G. J. *Richardson-Gardner, Col. R.	L. C. C. C. C. C.	4,245 2,986 4,631 4,429 4,710 3,062 3,518 3,389 1,431
Brecknockshire	1		9,520	Butler, H. E. *Maitland, W. F. Morgan, Hon. A.	L. C. C.	966 4,784 3,282
Buckinghamshire	3	N. or Buckingham Div. M. or Aylesbury Div. S. or Wycombe Div.	11,307 10,535 11,269	Verney, Capt. E. H. Wilson, Sir S. *Rothschild, Baron F. de Charsley, F. Clarke, C. Curzon, Viscount *Carington, Hon. R.	L. C. C. C. C.	5,462 4,066 5,476 2,624 296 5,092 4,239
Cambridgeshire	4	N. or Wisbech Div. W. or Chesterton Div. E. or Newmarket Div. Cambridge (1)	9,530 10,465 8,936 6,177	Rigby, J. Selwyn, Capt. Hall, C. Goodman, N. Newnes, G. *Hicks, E. Penrose-Fitzgerald, R. U. *Fowler, W.	L. C. C. C. C.	3,919 3,596 4,246 4,161 3,931 2,960 2,846 2,738
Cardiganshire	1		18,123	*Davies, D. Davies, V.	L. C. C.	5,967 3,644
Carmarthenshire	3	Eastern Div. Western Div. Carmarthen District	8,669 9,969 5,399	Pugh, D. Lloyd, Sir M. *Powell, W. R. H. *Emlyn, Viscount *Jenkins, Sir J. J. Tregoning, J. S.	L. C. C. C.	4,487 2,122 4,566 2,940 2,984 1,281
Carnarvonshire		S. or Eivion Div.	8,966	Roberts, J. Ellis-Nanney, H. J.	L. C.	4,535 2,573

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Cheshire	12	N. or Arvon Div. . .	9,157	*Rathbone, W.	L.	4,562
		Carnarvon Bors. (1)	4,488	Platt, Col. H.	C.	2,838
		Wirral Div.	9,772	*Jones-Parry, T. L. D.	C.	1,923
		Eddisbury Div. . . .	10,436	*Swetenham, E.	C.	1,858
		Macclesfield Div. . .	7,211	Cotton, Capt. E.	C.	4,750
		Crewe Div.	10,815	Tompkinson, J.	L.	3,261
		Northwich Div. . . .	10,577	*Tollemache, H. J.	C.	4,285
		Altrincham Div. . . .	10,497	Irwell, L.	L.	4,164
		Hyde Div.	9,328	Brocklehurst, W. C.	L.	3,311
		Knutsford Div. . . .	9,314	Brooks, W. C.	C.	2,846
		Birkenhead (1) . . .	12,215	Latham, G. W.	L.	5,089
		Chester (1)	6,296	Stephen, O. L.	C.	4,281
		Stockport (2)	9,560	Brunner, J. T.	L.	5,023
				Verdin, W. H.	C.	3,095
				Brooks, J.	C.	1,798
Cornwall	7	W. or St. Ives Div. .	7,606	Leadam, J. S.	L.	4,046
		N.W. or Camborne Div. .	7,139	Ashton, T. G.	L.	4,546
		Truro Div.	8,825	*Legh, W. J.	C.	3,990
		M. or St. Austell Div. .	8,890	*Egerton, Hon. A.	C.	4,663
		S.E. or Bodmin Div. .	9,158	Barlow, J. E.	L.	3,419
		N.E. or Launceston Div. .	9,297	Hamley, Gen. Sir E. B.	C.	5,733
		Penryn and Falmouth (1)	2,562	Kennedy, W. R.	L.	4,590
		N. or Eskdale Div. . .	10,000	Foster, Dr. B.	L.	2,740
		M. or Penrith Div. . .	9,123	Yerburgh, R. A.	C.	2,440
		Cockermouth Div. . .	9,587	Jennings, L. J.	C.	4,855
Cumberland	6	Egremont Div.	9,094	*Hopwood, C. H.	L.	4,486
		Carlisle (1)	5,726	Leigh, J.	L.	4,132
		Whitehaven (1) . . .	2,767	*St. Aubyn, Sir J.	L.	3,313
		E. or Bromfield Div. .	8,297	*Ross, C. C.	C.	2,576
		W. or Vale of Clwyd Div. .	8,899	Conybeare, C. A. V.	C.	2,906
		Denbigh District (1)	3,407	*Vivian, A. P.	L.	2,577
		High Peak Div. . . .	9,414	Smith, W. Bickford	C.	3,816
		N.E. Div.	9,207	*St. Aubyn, W. N. Molesworth	C.	2,883
		Chesterfield Div. . .	8,616	*Borlase, W. C.	L.	4,464
		W. Div.	10,310	Johnstone, J. H.	C.	2,183
Derbyshire	9	Mid Division	9,471	*Courtney, L. H.	L.	4,154
				Edgcumbe, Hon. C. E.	C.	3,101
				*Acland, C. T. D.	L.	4,690
				Lawrence, T. N.	C.	2,589
				*Jenkins, D. J.	L.	1,170
				Bentinck, W. G. C.	C.	1,069
				Allison, R. A.	L.	4,749
				Foster, T. P.	C.	3,163
				Howard, H. C.	L.	3,921
				*Lowther, J. W.	C.	3,448
Denbighshire	3			Valentine, C. J.	C.	3,845
				*Lawson, Sir W.	L.	3,835
				*Muncaster, Lord	C.	3,990
				*Ainsworth, D.	L.	3,453
				*Ferguson, R.	L.	Unop.
				*Bentinck, G. F. C.	C.	1,336
				Gully, W. C.	L.	1,125
				*Morgan, G. O.	L.	3,831
				*Wynn, Sir H. W. W.	C.	3,438
				West, Major W. C.	L.	4,586
Derbyshire	9			Mainwaring, Major C. S.	C.	2,992
				*Kenyon, Hon. G. T.	C.	1,761
				*Cunliffe, Sir R.	L.	1,455
				Sidebottom, Capt. W.	C.	4,199
				*Cheetham, J. F.	L.	4,190
				*Egerton, Adm. Hon. F.	C.	4,999
				Gould, C.	L.	2,536
				*Barnes, A.	L.	3,408
				Macdonald, J. C.	C.	2,156
				Haslam, J.	Lab.	1,907
Derbyshire	9			*Cavendish Lord E.	L.	5,080
				Arkwright, F. C.	C.	4,138
				Jacoby, J. A.	L.	5,447
				Barrow, J. B.	C.	3,007

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Devonshire	13	Ilkeston Div. . . .	10,660	Watson, T.	L.	5,780
		S. Div.	11,575	Drury-Lowe, W. D. N.	C.	3,793
		†Derby (2)	14,925	Wardle, H.	C.	6,186
				Curzon, Hon. G.	C.	4,094
				*Roe, T.	L.	7,813
				*Harcourt, Sir W. V.	L.	7,630
				Hextall, W. B.	C.	4,943
				Dyer, A. J.	C.	1,251
		Honiton Div. . . .	9,012	*Kennaway, Sir J. H.	C.	4,540
		N.E. or Tiverton Div.	9,349	Phear, Sir J. B.	L.	2,957
				*Walrond, Col.	C.	4,563
				Stern, S.	L.	3,460
		N. or South Molton Div.	9,343	*Lymington, Lord	L.	4,925
		N.W. or Barnstaple Div.	10,189	Trefusis, Col.	C.	2,924
		W. or Tavistock Div.	10,851	Pitt-Lewis, G.	L.	4,577
				Kekewich, A.	C.	3,734
				*Ebrington, Lord	L.	5,390
				Terry, I.	C.	3,172
		S. or Totnes Div. .	9,188	Mildmay, F.	L.	4,387
Dorsetshire	4			Lopes, H.	C.	3,252
		Torquay Div. . . .	7,738	M'Iver, L.	C.	3,509
				Mallock, R.	L.	3,161
		M. or Ashburton Div.	9,300	Seale-Hayne, C.	L.	4,433
				*Harris, W. J.	C.	3,128
		Devonport (2) . . .	6,546	*Price, Capt.	C.	2,968
				*Puleston, J. H.	C.	2,944
				Medley, G. W.	L.	2,653
				Terrell, T.	L.	2,636
		Exeter (1)	7,000	*Northcote, H. S.	C.	3,315
				*Johnson, E.	L.	3,074
		Plymouth (2) . . .	10,130	Bates, Sir E.	C.	4,354
				*Clarke, E.	C.	4,240
				*MacIver, P. S.	L.	4,132
				*Brett, Hon. R. B.	L.	3,968
		N. Div.	8,522	Portman, Hon. E. B.	L.	4,520
				Sturt, Hon. H.	C.	3,031
		E. Div.	9,797	Glyn, Hon. R. C.	L.	4,543
Durham	16			Bond, G. H.	C.	3,846
		S. Div.	7,316	Sturgis, H. P.	L.	3,128
				Hambro, Col.	C.	3,095
		W. Div.	7,914	Farquharson, H. R.	C.	3,507
				Batten, H. C. G.	L.	3,365
		Jarrow Div. . . .	12,897	*Palmer, C. M.	L.	5,702
				Johnston, J.	L.	1,731
		Houghton-le-Spring Div.	12,992	Wilson, J.	L.	6,511
				Wood, N.	C.	4,767
		Chester-le-Street Div.	11,830	Joicey, J.	L.	4,409
				Jones, L.	R.	3,606
		N.W. Div.	9,543	Ashworth, W.	C.	2,118
				Atherley-Jones, L.	L.	5,081
				Wilbraham, Col.	C.	3,085
		Mid Div.	11,053	Crawford, W.	L.	5,799
				Tempest, A. V.	C.	3,245
		S.E. Div.	13,169	Havelock-Allan, Sir H.	L.	5,603
				*Elliot, Sir G.	C.	4,854
		Bishop Auckland Div.	9,858	Paulton, J. M.	L.	5,907
Durham	16			Wyvill, M. D'A.	C.	2,280
		Barnard Castle Div.	9,991	*Pease, Sir J.	L.	5,962
				Bowes-Lyon, Hon. P.	C.	2,457
		Darlington (1) . .	5,907	*Fry, T.	L.	3,302
				Wilson-Todd, W. H.	C.	2,096
		Durham City (1) . .	2,302	Milvain, T.	C.	1,114
				*Thompson, T. C.	L.	993
		Gateshead (1) . . .	13,206	*James, W. H.	L.	5,756
				Bottomley, J. H.	C.	3,024
		Hartlepool (1) . . .	8,505	*Richardson, T.	L.	3,669
				Tristram, Dr.	C.	2,629
		South Shields (1) .	11,928	*Stevenson, J. C.	L.	4,064
				Seymour, W. D.	C.	3,128
		Stockton (1) . . .	9,179	*Dodds, J.	L.	4,236
				Wrightson, T.	C.	3,133

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Essex	11	Sunderland (2) . .	17,978	*Storey, S.	L.	8,295
				*Gourley, E. T.	L.	7,759
				Austin, S. P.	C.	6,703
		S.W. or Waltham-	11,233	Buxton, E. N.	L.	4,300
		stow Div.		*Baring, T.	L.	4,125
		S. or Romford Div.	12,591	Westlake, J.	C.	4,370
				Theobald, J.	C.	4,306
		W. or Epping Div. .	9,239	*Selwin-Ibbetson, Sir H.	C.	4,659
				Barnard, E. B.	L.	2,915
		N. or Saffron Walden	9,306	Gardner, H.	L.	4,755
		Div.		*Strutt, Hon. C.	C.	3,006
		N.E. or Harwich Div.	10,141	*Round, J.	C.	4,584
				Jackson, J.	L.	3,824
		E. or Maldon Div. .	9,869	Kitching, A. G.	L.	4,509
				Gray, C. W.	C.	3,878
Flintshire	2	Mid or Chelmsford	9,277	Beadel, W. J.	C.	4,321
		Div.		*Martin, R. B.	L.	3,079
		S.E. Div.	9,367	*Makins, Col. W. T. . . .	C.	3,707
				*Wills, W. H.	L.	3,500
		Colchester (1) . . .	4,238	Trotter, H. J.	L.	2,044
				*Causton, R. K.	L.	1,878
		West Ham (2) . . .	18,968			
		North	10,026	Cook, E. R.	L.	4,219
				Fulton, Forrest	C.	3,500
		South	8,942	Leicester, J.	L.	3,527
				Pound, A. J.	C.	2,548
		Flintshire (1) . . .	10,082	*Grosvenor, Lord R. . . .	L.	4,758
				Mostyn, Hon. H. S. L. . .	C.	3,132
		Flint District (1) .	3,773	*Roberts, J.	L.	1,835
				Pennant, Capt. P. P. . . .	C.	1,713
Glamorganshire . . .	10	E. Div.	8,544	Thomas, A.	L.	4,886
				Clark, G. L.	C.	2,086
		Rhondda Div. . . .	8,210	Abraham, W.	L.	3,857
				Davis, F. L.	L.	2,992
		W. or Gower Div. .	10,560	Yeo, F. A.	L.	5,560
				Miers, H. N.	C.	2,103
		Mid Div.	8,979	*Talbot, C. R. M.	L.	Unop.
		S. Div.	8,806	Williams, A. J.	C.	3,945
				Llewellyn, J. T. D. . . .	C.	3,351
		†Cardiff (1)	12,600	*Reed, Sir E. J.	C.	5,569
				Harben, H.	L.	5,429
		Merthyr Tydvil (2) .	15,196	*Richard H.	L.	Unop.
				*James C. H.	L.	Unop.
		Swansea District of				
		Boroughs (2) . . .	16,550			
Gloucestershire . . .	11	Swansea District . .	8,956	*Vivian, Sir H. H.	L.	Unop.
		Swansea Town . . .	7,594	*Dillwyn, L. L.	C.	3,660
				Meredyth, W. H.	C.	2,520
		M. or Stroud Div. .	11,665	*Brand, Hon. H. R.	L.	4,646
				Holloway, G.	C.	4,333
		N. or Tewkesbury	11,665	*Yorke, J. R.	C.	4,666
		Div.		Samuelson, G.	L.	4,484
		E. or Cirencester	10,517	Winterbotham, A. B. . . .	L.	4,782
		Div.		Dorington, J. E.	C.	4,035
		Forest of Dean Div.	9,458	Blake, T.	L.	5,143
				Plunkett, Hon. J. W. . . .	C.	2,421
		S. or Thornbury Div.	11,333	*Howard, E. S.	L.	4,834
				*Ackers, B. St. John . . .	C.	4,689
		Bristol (4)	36,549			
		North	9,002	*Fry, L.	L.	4,110
Gloucestershire . . .	11			Colston, C. E. H. A.	C.	3,046
		South	10,384	Weston, J. D.	L.	4,217
				Hill, Lieut.-Col. E. S. . .	C.	4,121
		East	9,506	Cossham, H.	L.	4,647
				Bissell, J. B.	C.	2,383
		West (including	7,657	*Hicks-Beach, Sir M. . . .	C.	3,876
		Clifton)		Nixon, B. de C.	L.	2,463
		Cheltenham (1) . .	6,697	Agg-Gardner, J. T.	C.	3,504
				Lehmann, R. C.	L.	2,700
		Gloucester (1) . . .	5,721	Robinson, T.	L.	2,222
				Wait, W. K.	C.	1,726

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Hampshire (including Isle of Wight.)	12	N. or Basingstoke Div.	7,745	*Sclater Booth, G.	C.	3,892
		W. or Andover Div.	9,183	Eve, R.	C.	2,313
		E. or Petersfield Div.	8,211	*Beach, W. W. B.	C.	4,559
				*Buxton, F. W.	C.	3,108
				Wolmer, Viscount	C.	3,414
		S. or Fareham Div. .	12,250	*Nicholson, W.	C.	3,253
				Henty, D.	C.	179
				*Fitzwygram, Gen. Sir F.	C.	5,177
		New Forest Div. .	9,431	Wilberforce, R. G.	C.	4,518
				Bompas, H. M.	C.	4,281
		Isle of Wight (1) .	11,993	*Webster, Sir R. E.	C.	3,511
		Christchurch (1) . .	4,626	*Ashley, Hon. A. E. M.	C.	5,495
				Young, C. B.	C.	5,059
		Portsmouth (2) . . .	20,341	*Davey, H.	C.	2,184
				Crossman, Col. Sir W.	L.	2,006
				Vanderbyl, P.	L.	8,367
		Southampton (2) . .	18,058	*Bruce, Hon. T. C.	C.	8,214
				*Wolf, Sir H. D.	C.	7,650
				Giles, A.	C.	7,595
				Commerell, Sir J.	C.	5,595
				*Lee, H.	C.	5,307
				Jones, E.	L.	4,566
Herefordshire . . .	3	Winchester (1) . . .	2,388	*Tottenham, A. L.	C.	4,535
		N. or Leominster Div.	9,516	*Baring, Viscount	C.	1,153
				*Duckham, T.	L.	982
		S. or Ross Div. . . .	10,380	*Rankin, J.	L.	3,871
				*Biddulph, M.	C.	3,750
Hertfordshire . . .	4	Hereford (1)	3,390	*Bailey, Sir J.	C.	4,415
		N. or Hitchin Div. .	8,996	*Pulley, J.	L.	3,043
				Barneby, W. H.	C.	1,360
		E. Div.	8,840	*Dimsdale, Baron	C.	1,296
				Fordham, H. G.	C.	4,418
Huntingdonshire . .	2	M. or St. Alban's Div.	8,741	Smith, A.	L.	2,869
				*Cowper, Hon. H. F.	C.	4,263
		W. or Watford Div.	10,029	Grimston, Lord	C.	3,027
				Coles, J.	L.	4,108
		S. or Huntingdon Div.	5,655	*Halsey, T. F.	C.	3,037
Kent	19	N. or Ramsey Div. .	5,919	Phillips, G. F.	C.	4,032
		W. or Sevenoaks Div.	11,090	Cooté, T., jun.	L.	3,712
				Montagu, Col. the Hon. O.	C.	2,354
		N.W. or Dartford Div.	11,172	*Fellowes, W. H.	C.	2,208
				Gordon, Lord E.	C.	2,775
		S.W. or Tunbridge Div.	11,370	Mills, C.	L.	2,410
				Nickalls, P.	C.	4,651
		M. or Medway Div.	13,482	*Dyke, Sir W. H.	C.	3,956
				Saunders, J. E.	L.	4,488
		N.E. or Faversham Div.	11,370	Norton, R.	C.	4,006
				Verney, F. W.	C.	4,533
		S. or Ashford Div. .	13,389	*Hardy, Hon. J. S. G.	C.	4,210
				*Waterlow, Sir S.	C.	6,212
		E. or St. Augustine's Div.	12,157	Knatchbull-Hugessen, H.	L.	5,118
				Belsey, F. F.	C.	5,067
		Isle of Thanet Div. .	7,941	Pomfret, W. P.	C.	4,123
				Whiteley, G. C.	L.	6,020
		Canterbury (1) . . .	3,371	*Akers-Douglas, A.	C.	4,895
				Simmons, A.	L.	5,842
		Chatham (1)	6,228	*King-Harman, Col. E. R.	C.	3,582
				Davies, E. F.	L.	3,381
		Deptford (1)	9,371	Heaton, J. H.	C.	2,670
				Aubrey, Dr. W. H. S.	L.	1,804
		Dover (1)	4,537	*Gorst, Sir J. E.	C.	825
				Collier, Hon. R.	C.	3,396
		Gravesend (1) . . .	4,200	Evelyn, W. J.	L.	2,610
				Ghose, L.	C.	3,927
		Greenwich (1) . . .	8,632	*Dickson, Major A. G.	C.	3,500
				Lawes, M.	L.	2,066
				White, J. R., jun.	C.	1,418
				Bevan, T.	C.	1,916
				Boord, T. W.	L.	1,850
				*Watney, Dr. H.	L.	3,317
						2,961

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Elect. orate.	Candidates.	Party.	No. of Votes.
Lancashire . . .	58	Hythe (1)	3,739	*Watkin, Sir E.	Ind.	2,247
		Lewisham (1) . . .	9,271	Morton, A. C.	L.	797
		Maidstone (1) . . .	4,314	*Lewisham, Visct.	L.	4,244
		Rochester (1) . . .	3,304	Whitworth, B.	L.	3,019
		Woolwich (1) . . .	9,769	*Ross, Major C.	L.	2,184
		Northern (4).		Sharp-Hume, Major M.	L.	1,839
		North Lonsdale Div.	9,219	Hughes-Hallett, Col. H.	L.	1,627
		Lancaster Div. . . .	8,961	*Edwards, J. P.	L.	1,386
		Blackpool Div. . . .	11,903	Hughes, E.	L.	4,760
		Chorley Div.	9,881	Hozier, Col.	C.	3,549
		North-Eastern (4).		Ainslie, W. G.	C.	4,166
		Darwen Div.	12,269	*Herschell, Baron	L.	3,941
		Clitheroe Div. . . .	12,689	Marton, Major G.	L.	4,387
		Accrington Div. . . .	10,797	*M'Coan, J.	L.	3,530
		Rossendale Div. . . .	11,450	*Stanley, Rt. Hon. Col. F. A.	C.	Unop
		South-Eastern (8).		*Feilden, Lt.-Gen.	C.	5,867
		West Houghton Div.	10,625	Wright, H.	L.	2,808
		Heywood Div.	9,260	Cranborne, Visct.	C.	5,878
		Middleton Div. . . .	11,748	Potter, J. G.	L.	5,873
		Radcliffe-cum-Farnworth Div.	10,433	Kay-Shuttleworth, Sir U.	L.	6,831
		Eccles Div.	9,871	Thursby, J. O. S.	C.	4,462
		Stretford Div.	11,140	*Grafton, F. W.	L.	5,320
		Gorton Div.	10,338	Hodge, R. T.	C.	4,842
		Prestwich Div. . . .	11,156	*Hartington, Lord	L.	6,060
		South-Western (7).		*Ecroyd, W. F.	C.	4,228
		Southport Div. . . .	8,437	Hardcastle, F.	C.	6,011
		Ormskirk Div.	8,714	Cross, E.	L.	3,741
		Bootle Div.	16,663	Hoyle, I.	L.	4,538
		Widnes Div.	8,223	Kenyon, J.	C.	3,955
		Newton Div.	9,344	Salis-Schwabe, Col.	L.	5,882
		Ince Div.	9,157	Feilden, T.	C.	4,885
		Leigh Div.	8,572	*Leake, R.	C.	5,092
		Ashton-under-Lyne (1)	6,553	Hulton, W. W. B.	C.	4,579
		Barrow-in-Furness (1)	6,660	Egerton, Hon. A. J. F.	C.	4,559
		Blackburn (2). . . .	16,331	Armitage, V. K.	L.	4,312
		Bolton (2)	16,863	*Agnew, W.	L.	4,866
				Maclure, J. W.	L.	4,676
				Peacock, R.	L.	5,300
				Flattely, D. I.	C.	3,452
				Buckley, A.	L.	5,414
				Mowbray, R. G. Cornish	C.	4,686
				Pilkington, G. A. C.	L.	3,741
				Edwardes-Moss, J.	C.	3,581
				Forwood, A. B.	C.	5,133
				Sheldon, J. P.	C.	2,343
				Sandys, Col.	C.	6,715
				Whitbread, S. H.	C.	3,933
				Edwardes-Moss, T. C.	L.	4,327
				Muspratt, E. K.	L.	2,650
				*Cross, Sir R. A.	L.	4,414
				M'Corquodale, Col.	C.	4,031
				Blundell, Col.	L.	4,271
				Percy, C.	L.	3,725
				Wright, C.	L.	4,261
				Knowles, L.	C.	3,275
				Addison, J., Q.C.	C.	3,164
				*Mason, H.	L.	3,118
				Duncan, D.	L.	2,958
				Schneider, H. W.	C.	2,612
				*Coddington, W.	C.	9,168
				*Peel, Sir R.	C.	8,425
				*Briggs, W.E.	L.	6,739
				Boothman, J. N.	Ind.	5,341
				Shepherd-Cross, H. S.	C.	7,933
				Bridgeman, Col.	C.	7,655
				*Cross, J. K.	L.	6,724
				*Thomasson, J. P.	L.	6,228
				Richardson, H. M.	Ind.	1,101

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Lancashire (contd.)		Burnley (1)	9,635	*Rylands, P. Wainwright, H. H.	L.	4,866
		Bury (1)	8,214	*James, Sir H., Q.C. Lawson, J. G.	C.	4,199
		Liverpool (9)	74,355		C.	3,976
		Kirkdale	8,346		C.	3,787
		Walton	7,683	Baden-Powell, G. S. Samuelson, J.	C.	3,301
		Everton	9,439	*Redmond, J. E. Gibson, J. E., Q.C.	N.	1,981
		West Derby	8,873	Birrell, A.	C.	765
		Scotland	7,075	*Whitley, E. Davies, F.	C.	3,492
		Exchange	8,171	*Hamilton, Lord C. Guthrie, M.	C.	2,500
		Abercrombie	9,137	*O'Connor, T. P. Woodward, M.	L.	4,535
		East Toxteth	7,992	Baily, L. R.	C.	2,063
		West Toxteth	7,684	*O'Shea, Capt. Stephens, T. E.	L.	4,213
		Manchester (6)	57,170	Lawrence, W. F.	L.	3,068
		North-West	12,685	*Smith, S.	N.	2,724
		North	8,703	*Worms, Baron H. de. Bigham, J. C., Q.C.	Ind.	1,474
		North-East	8,579	Sutherland, T.	C.	2,904
		East	9,779	*Houldsworth, W. H.	L.	2,909
		South	8,534	*Slagg, J.	L.	36
		South-West	8,890	Hutton, J. F.	C.	3,789
		Oldham (2)	26,030	Schwann, C. E.	C.	2,982
		Preston (2)	13,579	Ferguson, Sir J.	L.	3,597
		Rochdale (1)	10,808	*Blennerhasset, R. P.	C.	2,608
		St. Helen's (1)	8,309	*Balfour, A. J.	C.	3,754
		Salford (3)	24,553	Hopkinson, A.	L.	1,771
		North	7,734	Roscoe, Sir H.	C.	5,834
		West	8,197	Royle, P.	L.	5,111
		South	8,622	Hamilton, Lord F.	C.	4,093
		Stalybridge (1)	6,424	*Bright, Jacob	L.	3,118
		Warrington (1)	8,030	*Hibbert, J. T.	C.	4,341
		Wigan (1)	6,842	Macleay, J. M.	L.	2,893
				*Stanley, Hon. E. L.	C.	4,536
				Whitehead, S. T.	L.	3,712
				*Tomlinson, W. E. M.	C.	3,791
				Hanbury, R. W.	C.	3,121
				Russell, T. W.	C.	3,929
				*Potter, T. B.	L.	3,362
				Lees, E.	L.	12,259
				Seton-Karr, H.	C.	11,992
				Gamble, Col.	L.	11,847
				Hardcastle, E.	C.	11,491
				*Arnold, A.	L.	8,469
				*Armitage, B.	C.	7,971
				Worsley, Sir W.	L.	5,491
				Mather, W.	C.	5,552
				Bowles, T. G.	L.	4,417
				Sidebottom, T. H.	C.	3,750
				*Summers, W.	L.	3,693
				Greenall, Sir G.	C.	3,519
				Crosfield, W.	L.	3,343
				*Powell, F. S.	C.	3,704
				Lea, G. H.	L.	3,431
Leicestershire	6	E. or Melton Div. . . .	10,190	*Manners, Lord J.	C.	5,150
		M. or Loughborough Div. . . .	9,313	Ratcliff, D. E.	L.	3,868
		W. or Bosworth Div. . . .	9,919	*Johnson-Ferguson, J. E.	L.	4,733
		S. or Harborough Div. . . .	12,476	*Curzon, Major Hon. M.	C.	3,693
				Ellis, J.	L.	5,648
				Stopford-Sackville, S. G.	C.	3,051
				*Paget, T. T.	L.	5,502
				Tapling, T. K.	C.	5,336

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Elect. orate.	Candidates.	Party.	No. of Votes.
Lincolnshire . . .	11	Leicester (2) . . .	21,671	*Picton, J. A.	L.	11,480
				*M'Arthur, A.	L.	11,121
				Millican, Col.	L.	6,750
		West Lindsey or Gainsborough Div.	11,107	Bennett, J.	L.	4,955
		North Lindsey or Brigg Div. . . .	10,323	Sim, Gen. C. A. . . .	L.	3,850
				Meysey-Thompson, Sir H.	C.	5,643
		East Lindsey or Louth Div. . . .	10,252	*Atkinson, H. J. . . .	L.	3,006
				Otter, F.	C.	4,801
		South Lindsey or Horncastle Div. .	9,941	*Lowther, J.	C.	3,590
				*Stanhope, Right Hon. E.	C.	4,824
		North Kesteven or Sleaford Div. . .	9,863	Threlfall, T.	L.	3,959
				*Chaplin, Right Hon. H.	C.	4,761
		South Kesteven or Stamford Div. . .	9,741	Sharpe, C.	L.	3,460
				*Lawrance, J. C.	C.	4,631
		Holland or Spalding Div.	11,597	Cudlip, J. S.	L.	3,530
				*Finch-Hatton, Hon. M. E. G.	C.	4,658
		Boston (1)	2,789	Stewart, H.	L.	4,580
				Ingram, W. J.	C.	1,295
		†Grantham (1) . . .	2,863	Learoyd, N.	C.	996
Merionethshire . .	1			*Mellor, J. W.	C.	1,379
		†Grimsby (1) . . .	8,762	Earle-Welby, Capt. A. C.	C.	1,131
				*Heneage, E.	L.	3,711
				Campbell-Walker, Col. . .	C.	2,897
		Lincoln (1)	7,715	*Ruston, J.	L.	3,726
				Kerans, H.	C.	2,701
				*Robertson, H.	L.	3,784
			9,300	Wynne, W. R. N. . . .	C.	2,209
				*Lloyd, M.	L.	1,907
Middlesex	48	Enfield Div. . . .	8,621	*Folkestone, Lord . . .	C.	3,644
				Kempster, J.	L.	2,684
		Tottenham Div. . .	10,887	Howard, J.	C.	4,441
				*Caine, W. S.	L.	3,706
		Hornsey Div. . . .	10,648	*M'Garel-Hogg, Sir J. .	C.	4,619
				*Kensington, Lord . . .	L.	3,299
		Harrow Div. . . .	10,438	Ambrose, W.	C.	4,214
				Milner, A.	L.	3,241
		Ealing Div. . . .	9,283	*Hamilton, Lord G. . .	C.	4,353
				Hogg, G.	L.	2,691
		Brentford Div. . .	7,971	*Coope, O. E.	C.	3,563
				Haysman, J.	L.	2,267
		Uxbridge Div. . . .	9,902	*Dixon-Hartland, F. D. .	C.	5,093
				Rickman, J. P.	L.	2,615
		Bethnal Green (2) .	15,367			
		North-East	7,102	Howell, G.	L.	3,095
				Mayne, J. D.	C.	1,844
		South-West	8,265	Pickersgill, E. H. . . .	L.	3,088
				*Aylmer, Capt.	C.	2,200
		Chelsea (1)	11,104	*Dilke, Sir C.	L.	4,291
				Whitmore, C. A. . . .	C.	4,116
		Finsbury (3) . . .	26,055			
		Holborn	9,855	Duncan, Col.	C.	4,047
				Harrison, C.	L.	2,473
		East	8,600	Bigwood, J.	C.	2,055
				Rowlands, J.	L.	2,035
		Central	7,600	Spensley, Hon. L. . . .	L.	2,861
				Isaac, Saul	C.	2,314
		Fulham (1)	6,500	Fisher, W. H.	C.	2,642
				*Russell, G. W. E. . . .	L.	2,590
		Hackney (3) . . .	24,123			
		North	8,058	Pelly, Major-Gen. Sir L.	C.	3,327
				*M'Intyre, Æneas J. . .	L.	2,911
		Central	7,381	Hunter, Sir W. Guyer . .	C.	2,941
				*Holms, J.	L.	2,748
		†South	8,684	*Russell, Sir C.	C.	3,544
				Darling, C. J.	L.	2,602
		Hammersmith (1) .	9,611	Goldsworthy, Gen. . . .	C.	4,261
				Clarke, T. C.	C.	3,095
		Hampstead (1) . .	5,981	*Holland, Sir H. . . .	L.	2,785
				Lorne, Marquis of . . .	C.	1,910
				Williams, J.	L.	27

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorates.	Candidates.	Party.	No. of Votes.
Middlesex (contd.)		Islington (4)	30,166	Bartley, G. C. T.	C.	3,545
		North	7,774	*Waddy, S. D.	L.	2,972
		West	7,276	Chamberlain, R.	L.	3,370
		East	8,092	Thomas, Danford	C.	2,356
		South	7,024	*Ince, H. B.	L.	3,296
		Kensington (2)	17,156	Lambert, C.	C.	3,262
		North	8,297	Spicer, H.	L.	3,052
		South	8,859	Wright, W.	C.	2,500
		London City (2)	29,152	Lethbridge, Sir R.	C.	3,619
				*Firth, J. F. B.	L.	3,011
				Borthwick, Sir A.	C.	4,602
				Cookson, M.	L.	2,138
				*Fowler, Ald. Sir R. N.	C.	12,827
				*Hubbard, J. G.	C.	8,802
				Low, S.	L.	5,817
				*Cotton, Ald.	C.	5,563
		Marylebone (2)	14,655	Beresford, Lord C.	C.	3,130
		East	6,978	*Grant, D.	L.	2,186
		West	7,677	Hunt, Seager	C.	3,093
				Trower, H. S.	L.	1,595
				Knight, Sir H.	L.	701
				Diggle, Rev. J.	L.	101
		Paddington (2)	10,538	Cohen, L. L.	C.	2,482
		North	5,345	Digby, W.	L.	1,797
		South	5,193	*Churchill, Lord R.	C.	2,731
		St. George's, Hanover Square (1)	10,500	Skinner, H.	L.	1,025
				*Lawrence, W.	L.	290
				*Percy, Lord A.	C.	5,256
				Phillimore, Sir W.	L.	2,503
		St. Pancras (4)	23,820	Bolton, T. H.	L.	2,380
		North	5,447	Cochrane-Baillie, Hon. W.	C.	1,915
		East	5,913	Gibb, T. E.	L.	2,417
		West	7,103	Webster, R. G.	C.	2,151
		South	5,357	Lawson, W.	L.	2,954
				James, Capt.	C.	2,485
				Goldsmid, Sir J.	L.	2,225
				Maple, J. B.	C.	2,003
		Shoreditch (2)	15,246	*Stuart, J.	L.	3,084
		Hoxton	8,494	Germaine, R. A.	C.	2,047
		Haggerston	6,752	Cremer, W. R.	L.	2,736
				Uriin, R. D.	C.	1,259
		Strand (1)	11,264	*Smith, W. H.	C.	5,645
				Johnson, E. G.	L.	2,486
		Tower Hamlets (7)	46,982	Montagu, S.	L.	2,353
		Whitechapel	6,140	Cowan, Col.	C.	1,972
		St. George's East	4,322	*Ritchie, C. T.	C.	1,744
				Salomons, Sir D.	L.	1,180
		Limehouse	5,954	Norris, E. S.	C.	2,566
		Mile-End	5,804	Minchin, J. G.	L.	1,676
				Charrington, S.	C.	2,091
				Hart, E.	L.	1,442
		Stepney	6,926	Ayrton, A. S.	L.	420
				Durant, J. C.	L.	2,141
				Isaacson, F. W.	C.	2,119
		Bow and Bromley	8,795	Robson, W. S.	L.	3,419
				Colomb, Capt.	C.	2,738
		Poplar	9,041	Green, H.	L.	4,090
		Westminster (1)	7,670	*Onslow, D.	C.	2,113
				Burdett-Coutts, W.	C.	3,991
				Beesly, Professor	L.	1,736
				Price, Capt.	L.	5,693
				*Rolls, J. A.	C.	3,226
				Warmington, C. M.	L.	6,730
				Williams, B. F.	C.	1,341
Monmouthshire	4	N. Div.	10,703			
		W. Div.	9,770			

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Montgomeryshire.	2	S. Div.	11,068	*Morgan, Col. Hon. F. C.	C.	4,891
		Monmouth Dist. (1)	6,485	Jackson, Sir H.	L.	4,293
		Montgomeryshire (1)	8,869	*Carbutt, E. H.	L.	2,932
		Montgomery Dist. (1)	2,955	Cordes, T.	C.	2,922
Norfolk	10			*Rendel, S.	L.	4,044
				Wynn, C. W. W.	C.	3,389
				Jones, P.	C.	1,409
				*Hanbury-Tracy, Hon. F.	L.	1,326
		N.W. Div.	10,444	Arch, J.	Lab	4,461
				Bentinck, Lord H.	C.	3,821
		S.W. Div.	9,396	*Tyssen-Amherst, W. A.	C.	4,096
				Gurdon, Sir W. B.	L.	3,776
		N. Div.	9,742	Cozens-Hardy, H. H.	L.	5,028
				Hoare, S.	C.	3,342
Northamptonshire	7	E. Div.	11,161	*Birkbeck, E.	C.	4,682
				Falk, P.	L.	4,459
		Mid Div.	9,992	*Gurdon, R. T.	L.	5,275
				Fellowes, A.	C.	2,872
		S. Div.	10,141	Taylor, F.	L.	4,530
				*Buxton, Sir R. J.	C.	3,588
		King's Lynn (1) . .	3,060	*Bourke, Hon. R.	C.	1,472
				*Ffolkes, Sir W. H.	L.	1,302
		Norwich (2)	15,269	Bullard, H.	C.	7,279
				*Colman, J. J.	L.	6,666
Northumberland .	8			Wright, R. S.	L.	6,251
		Great Yarmouth (1)	6,950	*Tyler, Sir H. W.	C.	2,653
				Norton, Capt. C.	L.	2,458
		N. Div.	9,741	*Burghley, Lord	C.	4,467
				Carmichael, Sir J. M.	L.	4,296
		E. Div.	9,741	Channing, F. A.	L.	5,414
				Ramsden, R.	C.	2,359
		†Mid Div.	11,306	*Spencer, Hon. C. R.	L.	5,446
				*Phipps, P.	C.	4,347
		S. or Towcester Div.	9,636	*Knightley, Sir R.	C.	4,074
Northamptonshire	7			Fitzgerald, Sir M.	L.	4,012
		Northampton (2) . .	9,600	*Labouchere, H.	L.	4,845
				Bradlaugh, C.	L.	4,315
				Richards, H. C.	C.	3,890
		Peterborough (1) . .	3,790	*Fitzwilliam, Hon. J. W.	C.	1,853
				*Buxton, S. C.	L.	1,595
		Wansbeck Div. . . .	9,941	Fenwick, C.	L.	5,858
				Cookson, J. B.	C.	2,703
		Tyneside Div. . . .	11,640	*Grey, A. H.	L.	5,782
				Bruce, G. R. C.	C.	3,440
Northumberland .	8	Hexham Div.	10,225	MacInnes, M.	L.	5,193
				*Ridley, Sir M. W.	C.	3,663
		Berwick-upon-Tweed Div.	9,641	Grey, Sir E.	L.	4,799
		†Newcastle-on-Tyne (2)	30,314	*Percy, Earl	C.	3,316
				*Cowen, J.	L.	10,489
				*Morley, J.	L.	10,129
				Hamond, C. F.	C.	9,500
		Morpeth (1)	6,119	*Burt, T.	L.	Unop
		Tynemouth (1) . . .	6,207	Donkin, R. S.	C.	3,027
				Spence, J.	L.	2,267
Nottinghamshire .	7	Bassetlaw Div. . . .	9,479	Denison, W. B.	C.	4,307
				*Foljambe, F. J. S.	L.	4,072
		Newark Div.	10,214	Newark, Lord	C.	5,283
				*Earp, J. W.	L.	3,529
		Rushcliffe Div. . . .	11,132	Ellis, J. E.	L.	5,944
				Warner, J. H. B.	C.	3,308
		Mansfield Div. . . .	11,132	*Foljambe, C. G. S.	L.	6,120
				Payne, J. H.	C.	2,305
		Nottingham (3) . . .	40,429			
		West	14,929	*Seely, Col. C.	L.	6,669
Nottinghamshire .	7			Cope, E.	L.	3,797
				Burns, J.	Lab	598
		East	12,749	*Morley, A.	L.	5,239
				Finch-Hatton, Hon. H.	C.	4,248
		South	12,751	Williams, J. C.	L.	4,983
				Wright, H. S.	C.	4,620

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Oxfordshire . . .	6	N. or Banbury Div. .	8,478	*Samuelson, Sir B.	L.	4,436
				Wynne, L. M.	C.	2,944
		M. or Woodstock Div.	10,012	Maclean, F. W.	C.	4,327
				Valentia, Lord	C.	4,138
		S. or Henley Div. .	8,558	*Harcourt, Col. E. W.	C.	3,778
Pembrokeshire . .	2			Maude, F. W.	L.	3,258
		Oxford City (1) . .	6,983	Hall, A. W.	C.	3,212
				Fyffe, C. A.	C.	2,894
		Pembrokeshire (1) .	10,941	*Davies, W.	L.	4,999
				Philipps, C. E. G.	C.	3,738
Radnorshire . . .	1	Pembroke and Haverfordwest (1)	5,474	*Allen, H. G.	L.	2,415
				Mayne, Rear-Admiral	C.	2,150
				Walsh, Hon. A. H. J.	C.	1,880
Rutlandshire . . .	1		4,400	*Rogers, C. C.	L.	1,813
				*Finch, G. H.	C.	2,366
Shropshire	5			*Buszard, M. C.	L.	1,110
		W. or Oswestry Div.	10,083	*Leighton, S.	C.	4,753
				Jephson, H.	L.	3,772
		N. or Newport Div.	10,636	Bickersteth, R.	L.	4,694
				*Newport, Lord	C.	4,333
Somersetshire . .	10	M. or Wellington Div.	8,961	*Brown, A. H.	L.	4,807
				Kenyon-Slaney, Col. W.	C.	2,571
		S. or Ludlow Div. .	10,760	More, R. J.	L.	4,642
				*Leighton, Sir B.	C.	4,073
		Shrewsbury (1) . .	4,131	Watson, J. C.	C.	2,244
				Waring, C.	L.	1,512
		N. Div.	10,209	Llewellyn, E. H.	C.	4,176
				Strachey, E.	L.	3,491
		Wells Div.	9,501	*Paget, Col. R. H.	C.	4,201
				Ralli, P.	L.	3,335
		Frome Div.	10,498	Baker, L. J.	L.	4,735
				*Weymouth, Lord	C.	3,973
		E. Div.	9,344	Hobhouse, H.	L.	4,732
				Hoare, Sir H.	C.	3,280
		S. Div.	9,349	Kilcoursie, Lord	L.	4,534
Staffordshire . .	17			*Digby, J. K. W.	C.	3,268
		Bridgwater Div. . .	9,861	*Stanley, E. J.	C.	3,935
				Trevilian, E. C.	L.	3,835
		W. or Wellington Div.	9,537	*Acland, Sir T. D.	L.	4,299
				*Elton, C. I.	C.	3,760
		Bath (2)	5,965	Blaine, R. S.	L.	3,208
				*Wodehouse, E. R.	C.	2,990
				Laurie, Col. R. P.	L.	2,971
				*Hayter, Sir A. D.	C.	2,953
		Taunton (1)	9,349	*Allsopp, S. C.	C.	1,361
				Jessel, Sir C.	L.	978
		Leek Div.	10,234	Crompton, C.	L.	4,225
				*Davenport, H. T.	C.	4,063
		Burton Div.	9,400	*Bass, Sir M. A.	L.	5,395
				Hardy, G.	C.	2,543
		W. Div.	10,636	*Bass, H.	L.	4,820
Staffordshire . .	17			*Monckton, F.	C.	4,106
		†N.W. Div.	13,222	Leveson-Gower, G.	L.	5,757
				Edwards-Heathcote, Capt.	C.	4,720
		Lichfield Div. . . .	8,842	Swinburne, Sir J.	L.	3,126
				Mosley, T.	C.	2,013
		Kingswinford Div. .	12,272	*Hill, A. Staveley	C.	5,161
				Harrison, G. K.	L.	4,530
		Handsworth Div. .	14,908	*Wiggin, H.	L.	7,057
				Graham, H. R.	C.	4,107
		Hanley (1)	10,980	*Woodall, W.	L.	6,136
				Wright, Col.	C.	2,739
		Newcastle - under -	8,272	*Allen, W. S.	L.	4,031
		Lyme (1)		Scoble, A. R.	C.	2,848
		Stafford (1)	3,264	*M'Laren, B.	L.	1,532
				*Salt, T.	L.	1,485
Staffordshire . .	17	Stoke-upon-Trent (1)	9,214	Bright, W. L.	L.	4,790
				Corser, H.	C.	2,800
		Walsall (1)	11,000 (about)	*Forster, Sir C.	L.	5,112
				James, F.	C.	3,435

County.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Suffolk	8	Wednesbury (1) . .	10,808	Lloyd, W.	C.	4,628
		West Bromwich (1)	8,749	Stanhope, Hon. P.	L.	4,433
				Blades, J. H.	L.	3,988
		Wolverhampton (3).		Spencer, J. E.	C.	3,171
		East	7,917	*Fowler, H. H.	L.	3,935
				Bird, W.	C.	2,648
		South	8,636	*Villiers, Right Hon. C. P.	C.	Unop
		West	8,391	Hickman, A.	L.	3,722
				Plowden, W. C.	L.	3,569
		N. or Lowestoft Div.	10,956	Crossley, Sir S.	L.	4,324
				Bagot-Chester, Colonel H.	C.	3,743
		N.E. or Eye Div. . .	10,993	Stevenson, F. S.	L.	5,356
Surrey	22			Rodwell, B. B. H.	C.	3,360
		N.W. or Stowmarket Div.	10,587	Cobbold, F. T.	L.	4,606
		S. or Sudbury Div. .	10,522	*Thornhill, Sir T.	C.	3,475
				Quilter, W. C.	L.	4,913
				Poley, T. W.	C.	3,461
		S.E. or Woodbridge Div.	12,126	Everett, R. L.	L.	4,978
				*Rendlesham, Lord	C.	4,810
		Bury St. Edmunds (1)	2,181	Hervy, Lord F.	C.	1,122
				*Hardcastle, J. A.	L.	935
		Ipswich (2)	8,760	*West, H. W.	L.	3,795
				*Collings, J.	L.	3,777
				Ind, E. M.	C.	3,717
				Charley, Sir W.	C.	3,649
		N.W. or Chertsey Div.	9,204	Hankey, F. A.	C.	4,540
				Le Marchant, Sir H. de	L.	2,560
		S.W. or Guildford Div.	9,951	*Brodrick, Hon. St. J.	C.	4,485
		S.E. or Reigate Div.	9,170	Gosling, E. D.	L.	3,750
				*Lawrence, Sir J. T.	C.	4,726
				Carpenter, A.	L.	2,762
		Mid or Epsom Div. .	8,960	*Cubitt, G.	C.	4,621
				Harris, R.	L.	2,368
		Kingston Div. . . .	11,086	*Ellis, Sir J. W.	C.	4,915
				Hodgson, C. D.	L.	3,206
		N.E. or Wimbledon Div.	13,190	Bonsor, H. C.	C.	6,189
		Battersea and Clapham (2)	19,472	Cooper, J.	L.	3,745
		Battersea	10,018	Morgan, O. V.	L.	4,259
				Cooke, J. E.	C.	3,547
		Clapham	9,454	Moulton, J. F.	L.	3,976
				Bourke, Hon. A.	C.	3,650
		Camberwell (3) . .	27,282	Strong, R.	L.	3,137
		North	8,603	Blunt, W. S.	C.	2,975
				Baumann, A. A.	C.	3,362
		Peckham	9,716	*Willis, W.	L.	2,929
				Rogers, E. D.	L.	580
				Howard, M.	C.	4,406
				Collins, G.	L.	2,712
		†Croydon (1)	12,617	*Grantham, W.	C.	5,484
				*Balfour, J. S.	L.	4,315
		Lambeth (4)	31,716	Fraser, Gen.	C.	2,524
		North	7,939	Wren, W.	L.	2,346
				*Lawrence, Sir J. C.	L.	692
		Kennington	8,313	Gent-Davis, R.	C.	3,351
				Power, O'C.	L.	2,991
				Fielding, J.	L.	32
		Brixton	7,963	Baggallay, E.	C.	3,427
				Odgers, Dr. W. B.	L.	2,782
		Norwood	7,501	Bristowe, T. L.	C.	3,496
				Clayden, P. W.	L.	2,563
		Newington (2) . . .	12,375	Cooke, C. W. Radcliffe	C.	2,419
		West	6,377	Keay, J. Seymour	L.	1,774
				*M'Arthur, Sir W.	L.	821

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Sussex	9	Walworth . . .	5,998	Isaacs, L. H.	C.	1,885
				Henriques, A. G.	L.	1,816
				Malthouse, W.	L.	246
		Southwark (3) . .	25,663			
		West	7,775	*Cohen, A.	L.	2,851
				Beddall, A.	C.	2,611
		Rotherhithe . . .	8,455	Hamilton, Col.	C.	3,327
				Pankhurst, Dr.	L.	2,800
		Bermondsey . . .	9,433	*Rogers, T.	L.	3,469
				Lafone, A.	C.	3,386
		Wandsworth (1) . .	10,150	Kimber, H.	C.	4,459
				Wallace, R.	C.	3,283
		N.W. or Horsham Div.	8,582	*Barttelot, Sir W.	C.	4,483
				Barrow, S.	L.	2,468
Warwickshire	14	S.W. or Chichester Div.	8,502	*March, Earl of	C.	4,760
				Gibbs, F. W.	L.	2,470
		N. or East Grinstead Div.	7,660	*Gregory, G. B.	C.	3,530
				Heald, C.	L.	2,579
		Mid or Lewes Div. .	10,586	*Fletcher, Sir H.	C.	5,312
				Hubbard, W. E.	L.	3,181
		S. or Eastbourne Div.	8,507	Field, Capt. T.	C.	3,561
				Wallis, G. A.	L.	3,497
		E. or Rye Div. . .	10,304	Brookfield, Col. A. M.	C.	4,526
				*Inderwick, F. A.	L.	4,303
		Brighton (2) . . .	14,848	*Marriott, W. T.	C.	7,047
				Smith, Ald. D.	C.	7,019
				Probyn, J. W.	L.	4,899
				*Hollond, J. R.	L.	4,865
Westmoreland	2	Hastings (1) . . .	5,672	*Brassey, Sir T.	C.	2,712
				Noble, W.	C.	2,550
		N. or Tamworth Div.	10,048	*Muntz, P. A.	C.	4,338
				Beale, W. P.	L.	3,858
		N.E. or Nuneaton Div.	10,061	Johns, J. W.	L.	4,445
		S.W. or Stratford-on-Avon Div.	9,631	Dugdale, J. S.	C.	4,169
				Compton, Lord W.	L.	4,639
		S.E. or Rugby Div.	9,700	*Lloyd, S. S.	C.	3,738
				Cobb, H. P.	L.	4,877
		Aston Manor (1) . .	10,048	Darlington, J.	C.	3,533
				Reid, H. G.	L.	4,241
				Yates, R.P.	C.	3,088
		Birmingham (7) . .	70,575	Dixon, G.	L.	4,098
		Edgbaston	8,693	*Wilmut, Sir E.	C.	2,097
Wiltshire	6	†West	10,329	*Chamberlain, J.	C.	5,419
				Dumphreys, J.	C.	2,655
		Central	10,923	*Bright, J.	L.	4,989
				*Churchill, Lord R.	C.	4,216
		North	9,427	Kenrick, Ald. W.	C.	4,179
				Matthews, H.	C.	3,561
		East	9,382	Cook, Ald. W.	C.	4,277
				Lowe, F. W.	C.	3,025
		Bordesley	11,178	*Broadhurst, H.	L.	5,370
				Showell, W.	C.	4,043
		South	10,643	Williams, Ald. P.	L.	5,099
				Hawkes, H.	C.	3,312
		Coventry (1) . . .	9,736	*Eaton, H. W.	C.	4,565
				Warner, T. C. T.	L.	4,327
Westmoreland	2	Warwick and Leamington (1)	5,491	*Peel, A. W.	L.	2,644
				Nelson, M.	C.	2,272
		N. or Appleby Div. .	6,673	*Lowther, Hon. W.	C.	2,604
				Whitehead, J.	L.	2,684
		Kendal Div. . . .	6,149	Bective, Lord	C.	2,690
				*Cropper, J.	L.	2,427
Wiltshire	6	N. or Cricklade Div.	9,031	*Story-Maskelyne, M. N.	L.	4,541
				Stone, W.	C.	2,770
		N.W. or Chippenham Div.	8,853	Fletcher, B.	L.	3,880
				Somerset, Lord A.	C.	3,574
		W. or Westbury Div.	10,566	Fuller, G. P.	L.	5,333
				*Thynne, Lord H.	C.	3,639
Wiltshire	6	E. or Devizes Div. .	9,387	*Long, W. H.	C.	3,849
				Barber, W.	L.	3,752

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Worcestershire	8	S. or Wilton Div.	8,675	Grove, Sir T. F.	L.	4,151
		Salisbury (1)	2,508	*Herbert, Hon. S.	L.	3,329
		W. or Bewdley Div.	9,833	Grenfell, W. H.	L.	1,144
		S. or Evesham Div.	9,522	*Kennard, C. J.	C.	1,104
		M. or Droitwich Div.	9,484	*Lechmere, Sir E.	C.	4,525
		N. Div.	10,573	Fell, J.	L.	3,015
		E. Div.	8,187	Temple, Sir R.	L.	4,080
		Dudley (1)	14,918	Chamberlain, A.	L.	3,848
		Kidderminster (1)	4,547	*Corbett, J.	Ind.	Unop.
		Worcester (1)	6,714	Hingley, B.	L.	5,774
Yorkshire	52	<i>North Riding (4).</i>		Willis-Bund, J. W.	C.	2,155
		Thirsk and Maldon Div.	12,637	*Hastings, G. W.	L.	3,685
		Richmond Div.	11,237	Bosanquet, F. A.	C.	3,194
		Cleveland Div.	11,788	*Sheridan, H. B.	L.	6,377
		Whitby Div.	11,350	Robinson, B.	L.	5,211
		<i>East Riding (3).</i>		*Brinton, J.	C.	2,172
		Holderness Div.	9,143	Godson, F. A.	C.	2,024
		Buckrose Div.	9,113	Allsopp, G. R.	C.	2,974
		Howdenshire Div.	9,502	*Hill, T. R.	L.	2,890
		<i>West Riding, Nor. (5)</i>		*Dawnay, Col. Hon. L.	C.	5,966
		Skipton Div.	10,796	Turton, E. R.	L.	4,503
		Keighley Div.	10,072	*Milbank, Sir F.	L.	4,869
		Shipley Div.	14,066	*Elliott, G. W.	C.	4,320
		Sowerby Div.	11,364	Pease, H. F.	L.	6,948
		Elland Div.	11,851	*Dawnay, Hon. G.	C.	2,845
		<i>West Riding, Sou. (8)</i>		Denison, E.	C.	5,049
		Morley Div.	11,467	*Pease, A.	L.	4,709
		Normanton Div.	14,479	Bethell, Commander	C.	4,166
		Colne Valley Div.	10,881	*Smith, Col. G.	L.	3,537
		Holmfirth Div.	10,770	*Sykes, Christopher	C.	4,081
		Barnsley Div.	11,000	Cousins, James J.	L.	3,785
		Hallamshire Div.	13,176	Duncombe, A.	C.	4,525
		Rotherham Div.	10,730	Shiell, A. G.	L.	3,334
		Doncaster Div.	13,158	*Wilson, Sir M.	L.	5,059
		<i>West Riding, East (6)</i>		Lister, S. C.	C.	4,269
		Ripon Div.	9,049	*Holden, I.	L.	5,058
		Otley Div.	9,885	Dunhill, W. H.	C.	2,813
		Barkston Ash Div.	8,411	Craven, J.	L.	7,022
		Osgoldcross Div.	10,322	Hardy, L.	C.	4,825
				Crossley, E.	L.	6,418
				*Milner, Sir F.	C.	2,960
				Wayman, T.	L.	6,516
				Rasch, Capt.	C.	3,458
				Milnes-Gaskell, C.	L.	6,684
				Dunnington-Jefferson, J.	C.	3,177
				Pickard, B.	L.	5,608
				Charlesworth, Major	C.	3,706
				Beaumont, H. F.	L.	5,398
				Brooke, F.	C.	4,541
				Wilson, H. G.	L.	6,206
				Legge, Hon. H.	C.	3,063
				Kenny, C. S.	L.	6,795
				Vernon-Wentworth, B. C.	C.	2,722
				*Mappin, F. T.	L.	6,454
				Fitzwilliam, Hon. W. C. W.	C.	4,457
				Acland, A. H. D.	L.	6,301
				Hoole, Major.	C.	2,257
				Shirley, W. S.	L.	5,680
				Gathorne-Hardy, Hon. A. E.	C.	4,700
				Harker, W.	L.	3,985
				Wharton, J. L.	C.	3,820
				*Fairbairn, Sir A.	L.	5,048
				Fison, F. W.	C.	3,639
				*Gunter, Col. R.	C.	4,600
				Bayley, T.	L.	2,694
				*Ramsden, Sir J.	L.	5,153
				Hardy, R.	C.	3,053

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Yorkshire (contd.)		Pudsey Div. . . .	11,989	Priestley, B.	L.	6,363
				Duncan, S. W.	C.	4,039
		Spenn Valley Div. . .	9,645	Woodhead, J.	L.	5,826
				Gladstone, J. E.	C.	2,782
		Bradford (3)	30,555	*Illingworth, A.	L.	4,688
		West	8,988	Reed, H.	C.	3,406
		Central	11,297	*Forster, W. E.	L.	5,275
				Waud, G. M.	C.	3,732
		East	10,270	Holden, A.	L.	4,713
				Taylor, J.	C.	4,367
		Dewsbury (1)	11,000	*Simon, Serjeant	L.	6,124
				Fox, J.	C.	3,664
		Halifax (2)	12,289	*Shaw, T.	L.	6,269
				*Stansfeld, J.	C.	6,053
				Morris, A.	C.	3,988
		Huddersfield (1) . .	14,991	*Leatham, E. A.	L.	6,060
				Crosland, J.	C.	6,194
		Kingst'n-on-Hull (3)	31,197	Saunders, W.	L.	3,601
		East	8,053	Grotian, F. B.	C.	2,938
		Central	11,627	King, H. S.	C.	4,193
				*Norwood, C. M.	L.	4,027
				Billany, N. B.	L.	735
		West	11,517	*Wilson, C. H.	L.	5,247
				Rollit, Sir A. K.	C.	3,697
		Leeds (5)	53,683	*Jackson, W. L.	C.	4,494
		North	10,128	Rucker, A. W.	L.	4,237
		Central	11,135	Balfour, G. W.	C.	4,589
				*Barran, J.	L.	4,275
		East	8,831	Dawson, R.	C.	3,849
				Gane, J. L., Q.C.	L.	3,504
		West	12,058	*Gladstone, H. J.	L.	6,130
				Wheelhouse, Sir W.	C.	3,804
		†South	10,931	*Playfair, Sir L.	L.	5,208
				Macaskie, S. C.	C.	2,869
		Middlesbrough (1) .	11,788	*Wilson, I.	L.	6,961
				Dixon, Major	C.	4,035
		Pontefract (1) . . .	2,497	Winn, Hon. R.	C.	1,111
				*Childers, H. C. E.	L.	1,075
		Scarborough (1) . .	4,666	Sitwell, Sir G.	C.	2,185
				Glover, J.	L.	2,047
		Sheffield (5)	45,722	Coleridge, Hon. B.	L.	4,891
		Attercliffe	9,751	Hoare, B.	C.	3,633
		†Brightside	9,298	*Mundella, A. J.	L.	4,610
				Talbot, Lord E. B.	C.	3,382
		Central	9,923	Vincent, H.	C.	4,633
				Plimsoll, S.	L.	3,484
				Hawkes, M.	L.	140
		Hallam	7,486	*Stuart-Wortley, C. B.	C.	3,764
				Warren, Sir C.	L.	3,155
		Ecclesall	8,904	*Ashmead-Bartlett, E.	C.	4,182
				Dodd, C.	L.	3,490
		Wakefield (1) . . .	4,800	*Green, E.	C.	2,374
				Beaumont, W. C.	L.	2,049
		York (2)	12,415	Pease, A. E.	L.	5,353
				Lockwood, F., Q.C.	L.	5,260
				*Milner, Sir F.	C.	4,590
				Legard, Capt.	C.	4,377

SCOTLAND, 72 Members.

Aberdeenshire . .	4	E. Div.	12,522	Esslemont, P.	L.	6,509
				Gordon, Col. H. W.	C.	3,155
		W. Div.	12,500	*Farquharson, Dr. R.	L.	4,248
				Irvine, F. H., jun.	C.	2,010
				Kerr, Q.	Ind.	1,530

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Elect. of orate.	Candidates.	Party.	No. of Votes.
Argyllshire	1	Aberdeen (a)	16,069	Hunter, Dr. W. A.	L.	4,794
		North	8,256	M'Geagh, B. S. F.	C.	894
		South	7,813	Thom, J. W.	L.	177
			10,011	*Bryce, J.	L.	4,548
Ayrshire	4			*M'Kenzie, C.	L.	1,455
				*Macfarlane, D. H.	C.	3,340
				M'Kinnon, W.	Ind.	2,856
				M'Caig, J. S.	L.	670
Ayr District (1)	4	N. Div.	12,465	Elliot, Hon. H. F.	L.	5,700
		S. Div.	15,169	*Cochran-Patrick, R. W.	C.	4,740
				Wason, E.	C.	7,357
				*Alexander, Major-General	C.	5,447
Kilmarnock Dist. (1)	1	Ayr District (1)	5,449	*Campbell, R. F. F.	C.	2,460
				Low, M.	L.	2,118
				Sturrock, Provost	C.	3,645
				*Peddie, J. D.	C.	3,513
†Banffshire	1			Dalrymple, Lord	L.	1,862
				Storr, J. S.	C.	55
				*Duff, R. W.	L.	3,740
				Darling, M. T. S.	C.	2,008
Berwickshire	1			*Marjoribanks, Hon. E.	L.	3,758
				*Home, Col. D. M.	C.	1,225
				Robertson, J. P. B.	C.	1,374
				M'Lean, R. A.	L.	1,090
Caithness-shire	2	Caithness-shire (1)	4,320	Clark, G. B.	Crf.	2,110
				Sinclair, C. G.	L.	1,218
				*M'Donald-Cameron, J.	L.	876
				*Pender, J.	L.	831
†Clackmannan and Kinross-shires	1	Wick District (1)	2,015	*Balfour, Right Hon. J. B.	L.	Unop.
Dumfriesshire	2			*Orr-Ewing, Sir A.	C.	4,514
				*Reid, R. T.	L.	4,357
				*Jardine, Sir R.	L.	4,857
				Dalkeith, Earl of	C.	3,566
Dumfries Burghs (1)	1			*Noel, E.	L.	1,546
				Mattinson, M.	C.	1,363
Edinburghshire (Mid Lothian)	7	†Edinburghshire (1)	13,000	*Gladstone, W. E.	L.	7,879
				*Dalrymple, C.	C.	3,248
Edinburgh (4)	4	Edinburgh (4)	31,948	*Goschen, G. J.	L.	4,337
		East	7,618	Costelloe, B. F. C.	L.	1,929
		West	7,460	*Buchanan, T. R.	L.	3,800
		Central	8,158	Jamieson, G. A.	C.	2,625
†South	1			Wilson, J.	L.	2,930
				Renton, J. H.	C.	1,684
				Napier, Major	L.	1,606
				Black, A. W.	L.	770
Leith District (1)	1			Harrison, Sir G.	L.	4,273
				Raleigh, T.	L.	2,874
				Jacks, W.	L.	6,355
				Thorburn, W. D.	C.	2,485
Elgin and Nairn Shires	2	Elgin & Nairn Shires (1)	5,796	*Grant, Sir G. M'P.	L.	1,612
				Brodie, H.	C.	1,566
				Anderson, C. H.	C.	1,435
				Asher, A.	L.	Unop.
Fifeshire	4	†Elgin District (1)	4,196	Kinnear, J. B.	L.	4,533
		E. Div.	9,233	Gilmour, Capt.	C.	2,577
				*Bruce, Hon. R. P.	L.	Unop.
				*Campbell, Sir G.	L.	2,180
†St. Andrew's Dist. (1)	1	W. Div.	8,436	Inglis, J. M.	L.	1,504
		Kirkcaldy Dist. (1)	5,394	Munro, H. T., jun.	C.	746
				*Williamson, S.	L.	1,256
				Anstruther, Sir R.	Ind.	1,256
Forfarshire	4			*Barclay, J. W.	L.	6,157
				Lindsay, W. A.	C.	1,851
				Lacaita, C. C.	L.	8,261
				Robertson, E.	L.	7,187
Dundee (2)	1			Moncur, A. H.	L.	6,279
				Jenkins, E.	C.	5,149

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes
		Montrose District (a)	8,967	Will, J. S.	L.	3,532
				Gordon, A.	L.	2,779
				Mackie, Dr.	C.	963
Haddingtonshire .	1		6,487	Haldane, R. B.	C.	3,473
(East Lothian)				*Elcho, Lord	L.	1,945
Inverness-shire .	2	Inverness-shire (1).	9,330	*Fraser-Mackintosh, C.	L.	3,555
				MacLeod of MacLeod.	C.	2,031
				Mackenzie, Sir K. S. .	L.	1,897
		Inverness Dist. (1).	3,556	Finlay, R. H.	L.	1,709
				*M'Laren, W. S. B. . .	L.	1,546
Kincardineshire .	1		5,580	*Balfour, Sir G.	L.	3,160
				Porteous, D. S.	C.	1,267
Kirkcudbrightshire	1		5,720	Stewart, M. J.	C.	2,526
				Young, A.	L.	2,492
Lanarkshire . . .	14	Govan Div.	8,998	Pearce, W.	C.	3,677
				Burleigh, J. B.	L.	3,522
				Hoey, D. G.	L.	11
		Partick Div.	8,945	*Craig-Sellar, A. . . .	L.	3,726
				*Lennox, Lord H. . . .	C.	3,385
				Murdoch, J.	Crf.	74
		N.W. Div.	9,374	Baird, J.	C.	4,545
				Graham, R. C.	L.	3,442
		N.E. Div.	10,814	Crawford, D.	L.	4,564
				Cuninghame, J. C. . . .	C.	4,405
		Mid Div.	8,939	Mason, S.	L.	2,875
				Bousfield, W. R. . . .	C.	2,579
				Forrest, J. C.	L.	1,913
		S. Div.	8,984	*Hamilton, J. G. C. . .	L.	4,583
				Hozier, J., jun.	C.	3,245
		Glasgow (7)	75,293	Russell, E. R.	L.	3,599
		Bridgton	10,058	Maitland, E. V. A. . .	C.	3,478
				Forsyth, W.	N.	978
		Camlachie	9,220	Watt, H.	L.	4,047
				Reid, A.	C.	2,883
		St. Rollox	11,926	Martin, J.	R.	177
				*Culloch, J.	L.	4,950
				Cuthbertson, J. N. . .	C.	4,824
		Central	13,208	Beith, G.	L.	5,846
				Baird, J. G. A.	C.	4,779
		College	11,934	*Cameron, C.	L.	5,662
				Cuninghame, Sir W. . .	C.	4,139
		Tradeston	9,222	Corbett, A. C.	L.	4,354
				Somervell, J.	C.	3,240
				Greaves, W.	N.	86
		Blackfriars and Hutchesontown	9,725	*Henry, M.	L.	3,759
				Maughan, W. C. . . .	C.	3,137
				Maxwell, J. S.	N.	1,156
inlithgowshire .	1		6,808	*M'Lagan, P.	L.	3,801
(West Lothian)				Hope, Captain	C.	1,606
rkney & Shetland	1			Lyell, L.	L.	3,352
				Dundas, Hon. C. T. . .	C.	1,940
eebles-shire and Selkirkshire . .	1		3,250	*Temnant, Sir C. . . .	L.	1,746
erthshire	3	E. Div.	6,851	Montgomery, Sir G. G.	C.	1,038
				Menzies, R. S.	L.	4,222
		W. Div.	8,248	Murray, A. G.	C.	2,421
				*Currie, Sir D.	L.	3,786
				Moray, Col. D.	C.	3,290
		Perth (1)	4,126	*Parker, C. S.	L.	1,652
				Chisholm, J.	C.	1,099
				Macdougall, A. E. . .	L.	967
enfrewshire . . .	4	E. Div.	8,295	Finlayson, J.	L.	3,642
				Gilmour, A.	C.	3,144
		W. Div.	7,746	Campbell, Sir A. . . .	C.	3,618
				Smith, H.	L.	2,980
		Greenock (1) . . .	7,131	*Sutherland, T.	L.	3,057
				Scott, J.	C.	2,954
				Morrison, J. M. . . .	Ind.	65
		Paisley (1)	6,794	Barbour, W. B.	L.	3,390
				*Kerrell, Major	C.	2,523

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Ross and Cromarty Shires.	1	. . . . .	9,980	Macdonald, R.	Crf.	4,942
Roxburghshire . .	1	Roxburghshire (1) .	6,180	*Munro-Ferguson, R. C.	L.	2,995
				*Elliot, Hon. A. R. D.	L.	3,419
				Balfour, C. B.	C.	1,945
Stirlingshire . . .	3	†Hawick Burghs (1) .	5,678	*Trevelyan, Right Hon. G. O.	L.	Unop.
		Stirlingshire (1) .	12,486	*Bolton, J. C.	L.	6,454
				Shaw-Stewart, M. H.	C.	3,938
		Falkirk District (1) .	7,109	*Ramsay, J.	L.	3,104
				Mason, S.	C.	2,204
				Weir, J. G.	L.	814
				Roskill, J.	Ind.	74
		†Stirling Burghs . .	5,228	*Campbell-Bannerman, Right Hon. H.	L.	Unop.
Sutherlandshire . .	1	. . . . .	3,185	*Stafford, Marquis of Sutherland, A.	Crf.	1,701
Wigtownshire . . .	1	. . . . .	6,004	*Maxwell, Sir H.	C.	1,058
				Dalrymple, Hon. H.	L.	2,704
						2,625

IRELAND, 103 Members.

Antrim	8	N. Div.	8,948	*Macnaghten, E.	C.	3,233
				*Sinclair, W. P.	L.	2,149
				Pinkerton, J.	Ind.	1,915
		Mid Div.	8,307	O'Neill, Hon. R. T.	C.	3,832
				*Dickson, T. A.	L.	2,713
		E. Div.	8,772	M'Calmont, Capt.	C.	4,180
				Dawley, M.	L.	2,105
		S. Div.	10,824	Macartney, W. G. E.	C.	5,047
				Barbour, J. D.	L.	3,685
Belfast	4	East	30,363	De Cobain, E. S. W.	C.	3,033
			8,661	*Corry, Sir J. P.	C.	2,900
				Murray, R. W.	L.	875
		South	6,740	Johnston, W.	C.	3,610
				Workman, J.	L.	990
				Seeds, Dr.	C.	871
		West	8,131	Haslett, J. H.	C.	3,778
				*Sexton, T.	N.	3,743
		North	6,831	*Ewart, W.	C.	3,915
				Bowman, A.	L.	1,330
Armagh	3	N. Div.	7,947	Saunderson, Major	C.	4,192
		†Mid Div.	8,170	Shillington, T.	L.	2,373
				M'Kane, J.	C.	4,178
		S. Div.	8,192	*Leamy, E.	N.	2,667
†Carlow County . .	1	. . . . .	6,891	Blane, A.	N.	Unop.
				*Gray, E. D.	N.	4,801
				Butler, Sir T.	C.	751
Cavan	2	W. Div.	10,109	*Biggar, J. G.	N.	6,425
				Saunderson, S.	C.	1,779
		E. Div.	8,920	O'Hanlon, T.	N.	Unop.
Clare	2	E. Div.	10,128	Cox, J. R.	N.	6,224
				O'Brien, H. L.	C.	289
		W. Div.	9,813	Jordan, J.	N.	6,763
				Reeves, R. W. C.	C.	289
Cork County . . .	9	N. Div.	7,827	Flynn, J. C.	N.	4,902
				Walsh, T.	Ind.	102
		N.E. Div.	8,175	*Leamy, E.	N.	Unop.
		Mid. Div.	7,409	Tanner, C.	N.	5,033
				Patton, A.	C.	106
		E. Div.	6,934	Lane, W. J.	N.	4,314
				Stuart, H. Villiers	L.	266
		W. Div.	6,126	Gilhooly, J.	N.	3,920
				Payne, J. W.	C.	373
		S. Div.	7,299	Kenny, J. E.	N.	4,820
				O'Connor, M'C.	C.	195
		S.E. Div.	8,007	Hooper, J.	N.	4,620
				Warren, Sir A.	C.	661
		Cork City (2) . . .	14,569	*Farnell, C. S.	N.	6,682
				Healy, M.	N.	6,407
				Pike, J.	C.	1,456
				Bainbridge, J. H.	C.	1,390

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Donegal	4	N. Div.	6,933	O'Doherty, J. E.	N.	4,597
				Stewart, Lieut.-Col. H. H. A.	C.	952
		E. Div.	7,860	*O'Connor, A.	N.	4,089
				*Lea, T.	L.	2,992
Down	5	W. Div.	7,378	O'Hea, P.	N.	Unop.
		S. Div.	7,855	Kelly, B.	N.	5,055
				Forster, A. H.	Loy	1,379
				Waring, Col.	C.	4,315
Dublin County	8	N. Div.	9,274	Brown, J. S.	L.	2,841
		W. Div.	9,606	*Hill, Lord A. W.	C.	Unop.
		E. Div.	9,788	*Ker, Capt. R. W. B.	C.	Unop.
		S. Div.	10,337	*Small, J. F.	N.	4,945
Dublin City (4)	8			Kisbey, W. H.	C.	3,945
		Newry (1)	2,223	*M'Carthy, J. H.	N.	Unop.
		N. Div.	12,334	Clancy, J.	N.	7,560
				Caldbeck, W. R.	Loy	1,425
Dublin City (4)	8	S. Div.	11,316	Esmonde, Sir T.	N.	5,114
				*Hamilton, I. T.	C.	3,736
		College Green	11,586	Sullivan, T. D.	N.	6,548
				Sherlock, D.	L.	1,518
Dublin City (4)	8	Harbour	10,004	*Harrington, T.	N.	6,617
				*Blennerhasset, Sir R.	L.	1,652
		St. Stephen's Green	10,277	*Gray, E. D.	N.	5,277
				Guinness, Sir E. C.	C.	3,334
Dublin City (4)	8	St. Patrick's	8,906	Murphy, W. M.	N.	5,330
				Dockrell, M. E.	C.	1,162
				Redmond, W.	N.	3,255
				Bloomfield, J. C.	C.	2,822
Fermanagh	2	N. Div.	6,687	Campbell, H.	N.	3,574
		S. Div.	6,855	Brooke, F.	C.	2,181
Galway County	5	Connemara Div.	5,842	Foley, P. J.	N.	Unop.
		N. Div.	5,927	*Nolan, Col. J. P.	N.	Unop.
		E. Div.	8,083	Harris, M.	N.	4,866
				Nugent, Hon. R. A.	L.	353
Galway City (1)	5	S. Div.	7,720	Sheehy, D.	N.	Unop.
				*O'Connor, T. P.	N.	1,335
				Hallett, T. G. P.	L.	104
				Stack, J.	N.	Unop.
Kerry	4	N. Div.	5,972	O'Connor, J.	N.	2,742
		S. Div.	4,529	O'Connell, D.	Loy	133
		E. Div.	5,971	Sheehan, P.	N.	3,069
				Robertson, C.	C.	30
Kildare	2	W. Div.	5,668	Hartington, E.	N.	2,607
				Rowan, Col. W.	C.	262
Kilkenny County	3	N. Div.	5,108	Carew, J. L.	N.	3,168
				De Robeck, Baron.	C.	467
		S. Div.	5,070	*Leahy, J.	N.	Unop.
		N. Div.	5,647	*Marum, E. M.	N.	4,084
Kilkenny City (1)	3			Bellew, Hon. C. B.	Loy	174
		S. Div.	5,924	Chance, P. A.	N.	4,088
				De la Poer, L. R.	C.	222
		Kilkenny City (1)	1,899	*Smithwick, J. F.	N.	Unop.
King's County	2	Tullamore Div.	5,162	Fox, J.	N.	3,700
				Walsh, W. H.	L.	323
Kilkenny City (1)	3	Birr Div.	5,236	*Molloy, B. C.	N.	3,408
				Bernard, Captain	C.	760
		N. Div.	12,784	Conway, M.	N.	4,686
				*Tottenham, A. L.	C.	541
Limerick County	3	S. Div.	6,270	Hayden, L. P.	N.	4,775
				Lawder, J. O.	C.	489
		W. Div.	7,824	Abraham, W.	N.	Unop.
		E. Div.	8,474	Finucane, J.	N.	Unop.
Londonderry Co.	3	Limerick City (1)	5,973	Gill, H. J.	N.	3,008
				Spaight, J.	C.	635
		N. Div.	11,189	Mulholland, H. L.	C.	5,180
				*Walker, S.	L.	3,017
Londonderry City (1)	3	S. Div.	10,728	*Healy, T. M.	N.	3,723
				M'Calmont, Col.	C.	2,342
				*Findlater, W.	L.	1,816

COUNTY.	No. of Members.	Division or Borough.	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Longford	2	Londonderry City (1)	3,873	*Lewis, C. E.	C.	1,824
		N. Div.	3,714	*M'Carthy, J.	N.	1,795
		S. Div.	4,426	*M'Carthy, J.	N.	2,592
Louth	2	N. Div.	5,935	Wilson, J. M.	Loy.	163
		S. Div.	5,769	Connolly, L.	N.	3,046
		N. Div.	7,413	Wilson, J.	Loy.	321
Mayo	4	N. Div.	8,009	Nolan, J.	N.	2,581
		W. Div.	8,149	*Callan, P.	N.	1,451
		E. Div.	7,980	Gill, T. H.	N.	Unop
Meath	2	N. Div.	6,652	Crilly, D.	N.	Unop
		S. Div.	6,329	*Deasy, J.	N.	4,790
		†N. Div.	7,500	Stoney, J.	C.	131
Monaghan	2	S. Div.	7,499	Dillon, J.	N.	Unop
		†Ossory Div.	5,619	O'Brien, J. F.	N.	4,900
		Leix Div.	5,472	Malley, G. O.	C.	75
Queen's County	2	N. Div.	8,682	O'Doherty, K. I.	N.	Unop
		S. Div.	9,254	*Sheil, E.	N.	Unop
		Mid Div.	6,517	Healy, T. M.	N.	4,955
Roscommon	2	N. Div.	8,682	Leslie, Sir J.	C.	2,685
		S. Div.	9,254	*M'Kenna, Sir J. N.	N.	4,735
		Mid Div.	6,517	Shirley, S. E.	C.	993
Sligo	2	N. Div.	7,869	*O'Connor, A.	N.	3,959
		S. Div.	7,698	Caldbeck, R.	Ind.	293
		Mid Div.	6,517	*Lalor, R.	N.	3,749
Tipperary	4	N. Div.	7,500	Cosby, Captain	Ind.	597
		Mid Div.	6,517	*O'Kelly, J.	N.	4,664
		S. Div.	6,841	Mullany, P.	N.	1,438
Tyrone	4	N. Div.	6,742	Robertson, Col.	C.	368
		Mid Div.	8,083	*Commins, A.	N.	6,931
		S. Div.	7,725	Talbot, J. K.	C.	336
Waterford County	3	N. Div.	6,022	*Ffolliot, Captain	N.	5,216
		W. Div.	6,022	Sexton, T.	C.	772
		E. Div.	5,678	Perceval, A.	N.	5,151
Westmeath	2	N. Div.	5,507	O'Brien, P. J.	C.	541
		S. Div.	5,419	Eustace, H.	C.	296
		Mid Div.	8,083	*Mayne, T.	N.	3,865
Wexford	2	N. Div.	9,768	Ryan, G. C.	C.	355
		S. Div.	9,680	*O'Connor, J.	N.	3,572
		W. Div.	5,425	Barton, Col.	C.	122
Wicklow	2	N. Div.	5,569	Condon, P. R.	N.	4,064
		S. Div.	9,680	Trant, F.	C.	196
		E. Div.	5,569	Hamilton, Lord E.	C.	3,343
Waterford City (1)	3	N. Div.	5,507	Dillon, J.	N.	2,098
		S. Div.	5,419	*Kenny, M. J.	N.	4,099
		E. Div.	7,992	Moore, H. H.	C.	2,057
Westmeath	2	N. Div.	5,507	Reynolds, W. J.	N.	3,019
		S. Div.	5,419	Stuart, J. M.	C.	3,066
		E. Div.	7,992	*O'Brien, W.	N.	3,474
Wexford	2	N. Div.	9,768	Maxwell, Captain Hon. S.	C.	3,059
		S. Div.	9,680	Pyne, J. D.	N.	3,746
		W. Div.	5,425	Keane, Sir R. F.	C.	339
Wicklow	2	N. Div.	9,768	*Power, P. J.	N.	3,770
		S. Div.	9,680	De La Poer, R.	Loy.	314
		E. Div.	5,569	*Power, R.	N.	2,390
Waterford City (1)	3	N. Div.	5,507	Bloomfield, F. G.	C.	290
		S. Div.	5,419	Tuite, J.	N.	2,640
		E. Div.	7,992	Wilson, J.	Ind.	253
Westmeath	2	N. Div.	9,768	Sullivan, D.	N.	3,610
		S. Div.	9,680	Smith, H. S.	L.	200
		E. Div.	5,569	*Redmond, J. E.	N.	6,351
Wexford	2	N. Div.	9,768	Stopford, Lord	C.	81
		S. Div.	9,680	*Barry, J.	N.	Unop
		W. Div.	5,425	Byrne, G. M.	N.	3,721
Wicklow	2	N. Div.	9,768	Dick, W. W. F.	C.	81
		S. Div.	9,680	*Corbet, W. J.	N.	3,721
		E. Div.	5,569	Tottenham, Col.	C.	1,400

UNIVERSITIES, 9 Members.

COUNTY.	No. of Members.	Division or Borough	Reg. No. of Electorate.	Candidates.	Party.	No. of Votes.
Cambridge	2	. . . . .	6,505	*Beresford-Hope, Right Hon. A. J. B.	C.	Unop.
Dublin	2	. . . . .	4,127	*Raikes, Right Hon. H. C. *Plunket, Right Hon. D. R. *Holmes, H.	C.	Unop.
Edinburgh and St. Andrews	1	. . . . .	6,665	Macdonald, Rt. Hon. J. H. A. Erichsen, J. E.	C.	2,840
Glasgow and Aberdeen	1	. . . . .	6,918	*Campbell, J. A.	L.	2,453
London	1	. . . . .	2,400	*Lubbock, Sir J.	C.	Unop.
Oxford	2	. . . . .	5,473	*Mowbray, Sir J. A. *Talbot, J. G.	L.	Unop.

In the cases of four members there were double returns—namely, Mr. T. P. O'Connor, Mr. T. M. Healy, Mr. A. O'Connor, and Mr. E. D. Gray. The first-named gentleman was elected for the Scotland Division of Liverpool, and for Galway City; the second for North Monaghan, and South Londonderry; the third for East Donegal, and the Ossory Division of Queen's County; and the last for Carlow County, and the St. Stephen's Green Division of Dublin City. In St. Andrews District the two candidates received an equal number of votes.

Bye-Elections.

After Parliament met the Speaker was in due course informed that Mr. T. P. O'Connor, Mr. E. D. Gray, Mr. T. M. Healy, and Mr. A. O'Connor had respectively decided to sit for Liverpool (Scotland), Dublin (St. Stephen's Green), Londonderry (South), and Donegal (East), and an election consequently followed in Galway City, Carlow Co., Monaghan (North), and Queen's County (Ossory).

Altrincham.—On the death of Mr. Brooks (C) there was a fresh election for this division (Mar. 1886):—

Sir W. Cunliffe Brooks (C.) . . . 4,508
Mr. I. Leadam (L.) 3,925
—583

Armagh (Mid).—Professor M'Kane died Jan. 1886, and a fresh election followed in Feb.:—

Sir J. P. Corry (C.) 3,874
Mr. T. A. Dickson (L.) 2,965
—909

Banffshire.—Mr. R. W. Duff, on being appointed Civil Lord of the Admiralty, was re-elected without opposition (Feb. 1886).

Barrow.—Mr. Duncan (L.) being unseated on petition, there was a fresh election (April, 1886):—

Mr. Caine (L.) 3,109
Mr. Bruce (C.) 2,174
Mr. Edmonds (L.) 15

Battersea.—Mr. O. V. Morgan resigned, a technical difficulty having been raised concerning a government contract held by his firm, and was re-elected without opposition (March 1886).

Bedford (Luton).—Mr. C. Flower, on being appointed a Junior Lord of the Treasury, was re-elected without opposition (Feb. 1886).

Berwickshire.—Mr. Marjoribanks, on being appointed Comptroller of the Household, was re-elected without opposition (Feb. 1886).

Birmingham (West).—Mr. Chamberlain, on being appointed President of the Local Government Board, was re-elected without opposition (Feb. 1886).

Cardiff.—On Sir E. J. Reed being appointed a

Junior Lord of the Treasury, there was a contest in this borough (Feb. 1886):—

Sir E. J. Reed (L.) 5708
Mr. J. T. D. Llewellyn (C.) 4845
—863

Carlow Co. (Jan. 1886):—Mr. John H. Blake (N.) returned unopposed.

Clackmannan and Kinross.—Mr. J. B. Balfour, on being appointed Lord Advocate, was re-elected without opposition (Feb. 1886).

Croydon.—Mr. Grantham being elevated to the judicial bench, another election took place (January 1886):—

Mr. Sidney Herbert (C.) 5,205
Mr. Sydney Buxton (L.) 4,458
—747

Derby.—Sir William Harcourt, on being appointed Chancellor of the Exchequer, was re-elected without opposition (Feb. 1886).

Edinburgh (South).—Sir George Harrison dying (1885), another election took place (Jan. 1886):—

Right Hon. H. C. E. Childers (L.) . . . 4,029
Master of Polwarth (C.) 1,730

Majority 2,299

Mr. Childers, on being appointed Home Secretary, was re-elected without opposition.

Elgin District.—Mr. Asher, on being appointed Solicitor-General for Scotland, was re-elected without opposition (Feb. 1886).

Flintshire.—On the resignation of Lord R. Grosvenor there was a fresh election in this county (March 1886):—

Mr. Samuel Smith (L.) 4,248
Mr. Pennant (C.) 2,738
—1,510

Galway City (Feb. 1886):—

Captain O'Shea (N.) 942
Mr. M. A. Lynch (N.) 54
—888

Grantham.—Mr. Mellor, on being appointed Judge-Advocate-General, was re-elected without opposition (Feb. 1886).

Grimsbey.—On Mr. Heneage being appointed

Chancellor of the Duchy of Lancaster there was a contest in this borough (Feb. 1886):—

Mr. Heneage (L.) 3,390
Col. C. Walker (C.) 2,330

Hackney (South).—On Mr. C. Russell being appointed Attorney-General, there was a contest in this division (Feb. 1886):—

Mr. C. Russell (L.) 3,174
Mr. A. R. Scoble (C.) 1,979
Mr. H. Munster (Ind.) 17

Hawick District.—Mr. Trevelyan, on being appointed Secretary for Scotland, was re-elected without opposition (Feb. 1886).

Ipswich.—New elections for this borough will take place April 14th to fill the two vacancies caused by the unseating of Mr. Jesse Collings (L.) and Mr. H. W. West (L.) on petition.

Leeds (South).—Sir Lyon Playfair, on being appointed Vice-President of the Council, was re-elected without opposition (Feb. 1886).

Midlothian.—Mr. Gladstone, on accepting office as First Lord of the Treasury, was re-elected without opposition (Feb. 1886).

Monaghan (North) (Feb. 1886):—

Mr. P. O'Brien (N.) 4,032
Mr. J. C. Hall (C.) 2,534

Newcastle-on-Tyne.—On Mr. J. Morley being appointed Chief Secretary for Ireland there was a contest in this borough (Feb. 1886):—

Mr. J. Morley (L.) 11,110
Mr. C. F. Hamond (C.) 8,449

—1,498

—2,661

Northamptonshire (Mid).—Mr. C. R. Spencer, on being appointed Groom-in-waiting to Her Majesty, was re-elected without opposition (Feb. 1886).

Norwich.—Mr. Samuel Hoare (C.) was returned unopposed for this seat, vacated by the unseating of Mr. Bullard (C.) on petition (April 1886).

Queen's County (Ossory) (Feb. 1886).—Mr. Stephen O'Mara was returned unopposed.

St. Andrews District (Feb. 1886).—In regard to the tie between Sir R. Anstruther and Mr. S. Williamson, a petition was presented for a scrutiny of the ballot papers, and the Court of Session decided that Sir Robert had been returned by a majority of two.

Sheffield (Brightside).—Mr. Mundella, on being appointed President of the Board of Trade, was re-elected without opposition (Feb. 1886).

Somersetshire (South).—Viscount Kilcoursie, on being appointed Vice-Chamberlain of the Household, was re-elected without opposition (Feb. 1886).

Staffordshire (North-West).—Mr. G. Leveson-Gower, on being appointed a Junior Lord of the Treasury, was re-elected without opposition (Feb. 1886).

Stirling District.—Mr. Campbell-Bannerman, on being appointed Secretary for War, was re-elected without opposition (Feb. 1886).

No change in the balance of parties has been made by any of the above bye elections.

The New Parliament (from the *Times*). The following is a complete List of the Members of the New Parliament, including the double return from St. Andrew's Burghs.

The total result was that 331 Liberals, 249 Conservatives, 4 Independents, and 86 Nationalists were returned. The bye-elections which have taken place since the return of the new parliament are recorded at the end of "THE GENERAL ELECTION" (*q.v.*)

Members of the last Parliament are denoted by an asterisk (*). The names of those who have ceased to be members for a constituency since the General Election are indicated by a †, and particulars are given in the list of bye-elections. A list of members returned since the General Election is given below.

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
Abraham, W. . .	L	Glamorgan, Rhondda	*Ashmead-Bartlett, E.	C	Sheffield, Eccleshall
Abraham, W. . .	N	Limerick, West	Ashton, T. G. . .	L	Cheshire, Hyde
Acland, A. H. D. .	L	Yorks, Rotherham	Atherley-Jones, L.	L	Durham, North-west
*Acland, C. T. D. .	L	Cornwall, Launceston	Baden-Powell, G.	C	Liverpool, Kirkdale
*Acland, Sir T. D. .	L	Somerset, Wellington	Baggallay, E. . .	C	Lambeth, Brixton
Addison, J. Q. C.	C	Ashton-under-Lyne	Baily, L. R. . . .	C	Liverpool, Exchange
Agg-Gardner, J. T.	C	Cheltenham	Baird, J.	C	Lanarkshire, N.W.
*Agnew, W. . . .	L	Lancashire, Stretford	Baker, L. J. . . .	L	Somersetshire, Frome
Ainslie, W. G. . .	C	Lancashire, N., North Lonsdale	*Balfour, Sir G. .	L	Kincardineshire
*Akers-Douglas, A.	C	Kent, St. Augustine's	*Balfour, A. J. . .	C	Manchester, East
*Allen, H. G. . .	L	Pembroke and Haverfordwest	Balfour, G. W. .	C	Leeds, Central
*Allen, W. S. . .	L	Newcastle-under-Lyne	*Balfour, J. B. . .	L	Clackmannan & Kinross
Allison, R. A. . .	L	Cumberland, Eskdale	Barbour, W. B. .	L	Paisley
Allsopp, G. H. . .	C	Worcester	*Barclay, J. W. .	L	Forfarshire
*Allsopp, S. C. . .	C	Taunton	*Barnes, A. . . .	L	Derbysh., Chesterfield
Ambrose, W. . . .	C	Middlesex, Harrow	*Barry, J.	N	Wexford, South
*Amherst, W. A. T.	C	Norfolk, South-west	Bartley, G. C. T.	C	Islington, North
Anstruther, Sir R.	L	St. Andrews District	*Bartelot, Sir W.	C	Sussex, Horsham
Arch, J.	L	Norfolk, North-west	*Bass, H.	L	Staffordshire, West
*Armitage, B. . .	L	Salford, West	*Bass, Sir M. A. .	L	Staffordshire, Burton
*Asher, A. . . .	L	Elgin District	Bates, Sir E. . .	C	Plymouth
			Baumann, A. A. .	C	Camberwell, Peckham

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Beach, Sir M. Hicks	C	Bristol, West	*Cavendish, Lord E.	L	Derbyshire, West
*Beach, W. W. B.	C	Hampshire, Andover	*Chamberlain, J.	L	Birmingham, West
Beadel, W. J.	C	Essex, Chelmsford	Chamberlain, R.	L	Islington, West
Beaumont, H. F.	L	Yorkshire, W.R., S., Colne Valley	Chance, P. A.	N	Kilkenny, South
*Bective, Lord	C	Westm'land., Kendal	Channing, F. A.	L	Northamptonshire, E.
Beith, G.	C	Glasgow, Central	*Chaplin, H.	C	Lincolnshire, Sleaford
Bennett, J.	L	Lincolnsh., Gainsboro'	Charrington, S.	C	Leamington, South
*Bentinck, G. A. F.	C	Whitehaven	*Churchill, Lord R.	N	Dublin County, North
*Beresford-Hope, A. J. B.	C	Cambridge University	Clancy, J. J.	L	Caithness-shire
Beresford, Lord C.	C	Marleybone, East	Clark, G. B.	C	Plymouth
Bethell, Com.	C	Yorkshire, E.R., Holderness	*Clarke, E.	C	Warwickshire, Rugby
Bickersteth, R.	L	Shropshire, Newport	Cobb, H. P.	L	Suffolk, Stowmarket
*Biddulph, M.	L	Herefordshire, Ross	Cobbold, F. T.	C	Blackburn
*Biggar, J. G.	N	Cavan, West	*Coddington, W.	L	Southwark, West
Bigwood, J.	C	Finsbury, East	Cohen, A.	C	Paddington, North
*Birkbeck, E.	C	Norfolk, East	Cohen, L. L.	C	Sheffield, Attercliffe
Blades, J. H.	L	West Bromwich	Coleridge, Hon. B.	L	Ipswich
Blaine, R. S.	C	Bath	*Collings, J.	L	Norwich
Blake, T.	L	Glo'ster, Forest Dean	*Colman, J.	C	Southampton
Blane, A.	N	Armagh, South	Commerell, Sir J.	N	Roscommon, South
Blundell, Col.	C	Lanc., S.W., Ince	Commins, A.	L	Warwick., Stratford
*Bolton, J. C.	C	Stirlingshire	Compton, Lord	C	Hampsh., New Forest
Bolton, T. H.	L	St. Pancras, North	Condon, P. R.	N	Tipperary, East
Bonsor, H. C.	C	Surrey, Wimbledon	Connolly, L.	N	Longford, South
*Boord, T. W.	C	Greenwich	Conway, M.	N	Leitrim, North
*Borlase, W. C.	L	Cornwall, St. Austell	Conybeare, C. A.	L	Cornwall, Camborne
Borwick, Sir A.	C	Kensington, South	Cook, E. R.	L	West Ham, North
*Bourke, Hon. R.	C	King's Lynn	Cook, W.	L	Birmingham, East
Bradlaugh, C.	L	Northampton	Cooke, C. W. R.	C	Newington, West
Brand, Hon. H. R.	L	Gloucestersh., Stroud	*Coope, O. E.	C	Middlesex, Brentford
Brassey, Sir T.	L	Hastings	Coote, T., Jun.	L	Huntingdonshire, S.
Bridgeman, Col.	C	Bolton	*Corbet, W. J.	N	Wicklow, East [wich
Bright, John	L	Birmingham, Central	*Corbett, J.	L	Worcestersh., Droit-
Bright, W. L.	L	Stoke-upon-Trent	Corbett, L.	L	Glasgow, Tradeston
Brinton, J.	L	Kidderminster	Cossham, H.	L	Bristol, East
Bristowe, T. L.	C	Lambeth, Norwood	Cotton, Capt. E.	C	Cheshire, Wirral
Broadhurst, H.	L	Birm'gham, Bordesley	*Courtney, L. H.	L	Cornwall, Bodmin
Brocklehurst, W.	L	Cheshire, Macclesfield	*Cowen, J.	L	Newcastle-on-Tyne
Brodrick, Hon. St. J.	C	Surrey, Guildford	Cox, J. R.	N	Clare, East
Brookfield, A. M.	C	Sussex, Rye	Cozens-Hardy, H.	L	Norfolk, North
Brooks, W. C.	C	Cheshire, Altrincham	*Craig-Sellar, A.	L	Lanarkshire, Partick
Brown, A. H.	L	Shropsh., Wellington	Cranborne, Lord	C	Lanc., N.E., Darwen
Bruce, Hon. R. P.	L	Fifeshire, West	Craven, J.	L	Yorkshire, Shipley
Brunner, J. T.	L	Cheshire, Northwich	Crawford, D.	L	Lanarkshire, N.E.
Bryce, J.	L	Aberdeen, South	Crawford, W.	L	Durham, Mid
Buchanan, T. R.	L	Edinburgh, West	Cremer, W. R.	L	Shoreditch, Haggess-
Buckley, A.	L	Lanc., S.E., Prestwich	Crilly, D.	N	Mayo, South [ton
Bullard, H.	C	Norwich	Crompton, C.	L	Staffordshire, Leek
Burdett-Coutts, W.	C	Westminster	*Cross, Sir R. A.	C	Lancashire, Newton
Burghley, Lord	C	Northamptonshire, N.	Crossley, E.	L	Yorks, W.R., Sowerby
Burt, T.	L	Morpeth	Crossley, Sir S.	L	Suffolk, Lowestoft
Buxton, E. N.	L	Essex, Walthamstow	Crossman, Sir W.	C	Portsmouth
Byrne, G. M.	N	Wicklow, West	*Cubitt, G.	C	Surrey, Epsom
Cameron, Dr. C.	L	Glasgow, College	*Currie, Sir D.	L	Perthshire, West
Cameron, J. McD.	L	Wick District	Curzon, Lord	C	Bucks, Wycombe
Campbell, Sir A.	L	Renfrewshire, West	*Davies, D.	L	Cardiganshire
Campbell, Sir G.	N	Kirkcaldy District	*Davies, R.	L	Anglesea
Campbell, H.	N	Fermanagh, South	*Davies, W.	L	Pembrokeshire
Campbell, J. A.	C	Glasgow and Aberdeen University	*Dawnay, Col. Hon.	C	Yorks, N.R., Thirsk and Malton
Campbell, R. F. F.	L	Ayr Burghs	Dawson, R.	C	Leeds, East
Campbell-Bannerman, H.	L	Stirling	*Deasy, J.	N	Mayo, West
Carrbutt, E. H.	L	Monmouth District	De Cobain, E. S.	C	Belfast, East
Carrington, T. M.	N	Kildare, North	Denison, E.	C	Yorkshire, Whitby
			Denison, W. B.	C	Notts, Bassetlaw
			*De Worms, Baron H.	C	Liverpool, E. Toxteth
			*Dickson, A. G.	C	Dover

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Dilke, Sir C.	L	Chelsea	Fry, L.	L	Bristol, North
Dillon, J.	N	Mayo, East	Fry, T.	L	Darlington
*Dillwyn, L. L.	N	Swansea Town	*Foller, G. P.	L	Wiltshire, Westbury
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*Stevenson, J. C. . .	C	Kirkcudbrightshire	. . . White, J. R. . . .	L	Bedford
Stewart, M. J. . . .	L	Sunderland	*Whitley, E. . . .	C	Gravesend
*Storey, S. . . .	L	Wiltshire, Cricklade	*Wiggin, H. . . .	C	Liverpool, Everton
*Story-Maskelyne, M. H. N. . . .	L	Camberwell, North	. . . Will, J. Shireess . .	L	Staffs., Handsworth
Strong, R. . . .	L	Sheffield, Hallam	. . . Williams, A. J. . .	L	Montrose District
*Stuart - Wortley, C. B. . . .	C	Shoreditch, Hoxton	. . . Williams, J. C. . .	L	Glamorganshire, S.
Stuart, J. . . .	L	Dorsetshire, South	. . . Williams, J. F. . .	L	Nottingham, South
Sturgis, H. P. . . .	C	Kilmarnock	*†Williamson, S. . . .	L	Birmingham, South
Sturrock, Provost	N	Westmeath, South	. . . Wilson, C. H. . . .	L	St. Andrew's District
Sullivan, D. . . .	N	Dublin City, Coll. Grn.	. . . Wilson, H. J. . . .	L	Hull, West
Sullivan, T. D. . . .	N	Greenock	*Wilson, I. . . .	L	Yorks, W.R., South
Sutherland, T. . . .	L	Staffs., Lichfield	. . . Wilson, J. . . .	L	Holmfirth
Swinburne, Sir J. . .	C	Yorks, E.R., Buckrose	. . . Wilson, J. . . .	L	Middlesbrough
Sykes, C. . . .	C	Glamorganshire, Mid	. . . Wilson, Sir M. . . .	L	Durham, Houghton-
Talbot, C. R. M. . .	C	Oxford University	. . . Winn, Hon. R. . . .	L	le-Spring
Talbot, J. G. . . .	C	Cork, Mid	. . . Winterbotham, A. .	L	Edinburgh, Central
Tanner, C. . . .	N	Norfolk, South	*Wodehouse, E. R. . .	L	Yorks, W.R. (North),
Taylor, F. . . .	C	Worc., Evesham	. . . Wolmer, Lord . . .	C	Pontefract [Skipton
Temple, Sir R. . . .	L	Peebles and Selkirk	. . . Woodall, W. . . .	L	Glouc., Cirencester
Tennant, Sir C. . . .	L	Shires	. . . Woodhead, J. . . .	L	Bath
Thomas, A. . . .	L	Glamorganshire, East	. . . Wortley, C. B. S. .	L	Hampsh., Petersfield
			. . . Wright, C. . . .	L	Staffordshire, Hanley
			*Wroughton, P. . . .	L	Yorks, Spen Valley
			. . . Yeo, F. A. . . .	C	Sheffield, Hallam
			*Yorke, Capt. J. R. . .	L	Lanc., S.W., Leigh
			. . . Young, C. E. B. . .	C	Berkshire, Abingdon
				C	Glamorgansh., Gower
				C	Glo'ster, Tewkesbury
				C	Christchurch

Members Returned since the General Election.

Hake, J. H. . . .	N	Carlou.	Hoare, Samuel . . .	C	Norwich
Brooks, Sir W. C. . .	C	Altrincham, Cheshire	O'Brien, P. O. . . .	N	Monaghan, North.
aine, W. S. . . .	L	Barrow-in-Furness	O'Mara, Stephen . .	N	Queen's County
Childers, H. C. E. . .	C	Edinburgh, South.			(Ossory).
orry, Sir J. P. . . .	C	Armagh, Mid.	*O'Shea, Capt. W. H. .	L	Galway City.
erbert, Hon. S. . . .	C	Croydon.	. . . Smith, S. . . .	L	Flintshire.

Number of Members returned and the State of Political Parties at the close of last and commencement of Present Parliaments.

Parliament of 1880-85.	Liberals.	Conservatives.	Mod. H. R.	Parnellites.	TOTALS.	Parliament elected 1885-86.	Liberals.	Independents.	Conservatives.	Parnellites.	TOTALS.
England and Wales—						England and Wales—					
London Boroughs . . .	14	8	.	.	22	London Boroughs . . .	23	.	36	.	59
Provincial Boroughs . .	184	79	.	.	263	Provincial Boroughs . .	95	3	79	1	178
Counties . . .	63	124	.	.	187	Counties . . .	150	1	102	.	253
Universities . . .	1	4	.	.	5	Universities . . .	1	.	4	.	5
Scotland—						Scotland—					
Boroughs and Groups . .	25	1	.	.	26	Boroughs and Groups . .	30	.	1	.	31
Counties . . .	25	7	.	.	32	Counties . . .	32	.	7	.	39
Universities . . .	1	1	.	.	2	Universities . . .	.	.	2	.	2
Ireland—						Ireland—					
Boroughs and Counties . .	17	23	17	44	101	Boroughs and Counties . .	.	.	16	85	101
University . . .	.	2	.	.	2	University . . .	.	.	2	.	2
TOTALS . . .	330	249	17	44	640	TOTALS . . .	331	4	1249	86	670

DECLARED OPINIONS OF MEMBERS OF THE NEW PARLIAMENT.

Those in these Lists with asterisk () denote new members.*

Affirmation, Permitting. Alphabetical List of Members of the House of Commons in favour of. (Compiled from the "Popular Guide to the New House of Commons.")

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Acland, A. H. D.	L	Yorks, Rotherham	Bruce, Hon. R. P.	L	Fifeshire, West
Acland, C. T. D.	L	Cornwall, Launceston	Bryce, J. . . .	L	Aberdeen, South
Agnew, W. . . .	L	Lancashire, Stretford	Buchanan, T. R. .	L	Edinburgh, West
Allen, W. S. . . .	L	Newcastle-under-Lyne	*Buckley, A. . . .	L	Lancashire, South-east, Prestwich
*Allison, R. A. . .	L	Cumberland, Eskdale	*Buxton, E. N. . .	L	Essex, South-west
*Arch, Joseph . . .	L	Norfolk, North-west	Cameron, Dr. C. .	L	Glasgow, Coll. Div.
Armitage, B. . . .	L	Salford, West	*Cameron, J. McD.	L	Wick District
*Atherley-Jones, L.	L	Durham, North-west	Campbell, Sir G. .	L	Kirkcaldy District
*Baker, L. J. . . .	L	Somersetshire, Frome	Campbell, R. F. F.	L	Ayr Burghs
Balfour, Sir G. . .	L	Kincardineshire	Campbell-Bannerman, H. .	L	Stirling
Balfour, J. B. . . .	L	Clackmannan and Kinross	Chamberlain, J. . .	L	Birmingham, West
*Barbour, W. B. . .	L	Paisley	*Chamberlain, R. .	L	Islington, West
Barclay, J. W. . . .	L	Forfarshire	*Channing, F. A. .	L	Northamptonshire, E.
*Beaumont, H. F. .	L	Yorks, W.R. (South), Colne Valley	*Clark, Dr. G. B. .	L	Caithness
*Bennett, J. . . .	L	Linc., W., Gainsboro'	*Cobbold, F. T. . .	L	Suffolk, Stowmarket
*Bickersteth, R. . .	L	Shropshire, Newport	Cohen, A. . . .	L	Southwark, West
*Blades, J. H. . . .	L	West Bromwich	*Coleridge, Hon. B.	L	Sheffield, Attercliffe
*Blake, T. . . .	L	Glo'ester, Forest Dean	Collings, Jesse . .	L	Ipswich
*Bolton, T. H. . . .	L	St. Pancras, North	*Cook, E. R. . . .	L	West Ham, North
Borlase, W. C. . . .	L	Cornwall, St. Austell	*Corbett, A. C. . .	L	Glasgow, Tradeston
Bradlaugh, C. . . .	L	Northampton	*Cosham, H. . . .	L	Bristol, East
Brand, Hon. H. R.	L	Glo'estershire, Stroud	Courtney, L. H. . .	L	Cornwall, Bodmin
Brassey, Sir T. . . .	L	Hastings	Cowen, J. . . .	L	Newcastle-on-Tyne
Bright, John	L	Birmingham, Central	*Cozens-Hardy, H. .	L	Norfolk, North
*Bright, W. L. . . .	L	Stoke-on-Trent	Craig-Sellar, A. . .	L	Lanarkshire, Partick
Broadhurst, H. . . .	L	Birm'gham, Bordesley	*Crawford, D. . . .	L	Lanarkshire, N.E.
*Brocklehurst, W. C.	L	Cheshire, Macclesfield	*Crawford, W. . . .	L	Durham, Mid [ton
Brown, A. H. . . .	L	Shropsh., Wellington	*Cremor, W. R. . .	L	Shoreditch, Hagger-

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Crompton, C. . .	L	Staffordshire, Leek	McArthur, A. . .	L	Leicester
*Crossley, E. . .	L	Yorks, W.R., Sowerby	*MacIver, L. . .	L	Devonshire, Torquay
*Crossman, Sir W.	L	Portsmouth	McLagan, P. . .	L	Linlithgowshire
Currie, Sir D. . .	L	Perthshire, West	McLaren, C. B. B.	L	Stafford
Davies, R. . . .	L	Anglesea	Maitland, W. F. .	L	Brecknockshire
Dillwyn, L. L. . .	L	Swansea Town	Majoribanks, Hon.	L	
Dodds, J.	L	Stockton	E.	L	Berwickshire
Duff, R. W. . . .	L	Banffshire	Maskelyne, Prof.	L	
*Durant, J. C. . .	L	Stepney	S.	L	Wiltshire, Cricklade
Elliot, Hon. A. . .	L		Mellor, J. W. . . .	L	Grantham
R. D.	L	Roxburghshire	*Menzies, R. S. . .	L	Perthshire, East
*Elliot, Hon. H. F.	L	Ayrshire, North	Milbank, Sir F. A. .	L	Yorks, N.R., Richm.
*Esselmont, P. . .	L	Aberdeenshire, East	*Milnes-Gaskell, C.	L	Yorks, W.R. (South),
Fairbairn, Sir A. .	L	Yorks, W.R., E., Otley			Morley
Forster, W. E. . .	L	Bradford, Central	*Montagu, S. . . .	L	Whitechapel
Fry, L.	L	Bristol, North	*Morgan, O. V. . .	L	Battersea
Fry, T.	L	Darlington	Morley, A.	L	Nottingham, East
*Gibb, T. E. . . .	L	St. Pancras, East	Morley, J.	L	Newcastle-on-Tyne
Gladstone, H. . .	L	Leeds, West	*Moulton, J. F. . .	L	Clapham
Gladstone, W. E. .	L	Midlothian	Mundella, A. J. . .	L	Sheffield, Brightside
*Goldsmid, Sir J. .	L	St. Pancras, South	Noel, E.	L	Dumfries Burghs
Goschen, G. J. . .	L	Edinburgh, East	*Otter, F.	L	Lincolnshire, South
Gourley, E. T. . .	L	Sunderland	Palmer, C. M. . . .	L	Durham, Jarrow
Grafton, F. W. . .	L	Lancashire, N.E.,	Parker, C. S. . . .	L	Perth
		Accrington	*Pease, A. E. . . .	L	York
Grant, Sir G. McP.	L	Elgin and Nairn	Pease, Sir J. W. . .	L	Durham, Barnard
Grey, Albert H. G.	L	Northumb., Tyneside			Castle
*Grey, Sir E. . . .	L	Northumb., Berwick-	*Pease, H. F. . . .	L	Yorks, N.R., Clevel'nd
		on-Tweed	Peel, A. W.	L	Warwick & Leamington
*Haldane, R. B. . .	L	Haddingtonshire	*Pickard, B. . . .	L	Yorks, Normanton
Hardy, J. S. G. . .	L	Kent, Medway	*Pickersgill, E. H.	L	Bethnal Green, S.W.
*Harker, W. . . .	L	Yorks, W.R., E., Ripon	Picton, J. A. . . .	L	Leicester
*Hartington, Mar-	L		*Pitt-Lewis, G. . .	L	Devonshire, N.W.
quis of		Lancashire, N.E.,	Playfair, Sir L. . .	L	Leeds, South
		Rossendale	Potter, T. B. . . .	L	Rochdale
Havelock - Allen,	L		*Price, T. P. . . .	L	Monmouthshire, N.
Genl. Sir H. . . .	L	Durham, South-east	*Priestley, B. . . .	L	Yorks, W.R. (East),
Hibbert, J. T. . . .	L	Oldham			Pudsey
*Holden, A.	L	Bradford, East	*Quilter, W. C. . .	L	Suffolk, Sudbury
Holden, I.	L	Yorks, W.R., North	Ramsay, J.	L	Falkirk District
		Keighley	*Ramsden, Sir J. .	L	Yorks, W.R. (East),
*Howard, H. C. . .	L	Cumberland, Penrith			Osgoldcross
*Howell, G.	L	Bethnal Green, N.E.	Reed, Sir E. J. . .	L	Cardiff
*Hoyle, I.	L	Lancashire, Heywood	Richard, H.	L	Merthyr Tydvil
*Hunter, Dr. W. A. .	L	Aberdeen, North	Richardson, T. . .	L	Hartlepool
Illingworth, A. . .	L	Bradford, West	*Robson, W. S. . .	L	Bow and Bromley
Ince, H. B.	L	Islington, East	Rogers, J. E. T. . .	L	Bermondsey
			Russell, C.	L	Hackney, South
*Jacks, W.	L	Leith Burghs	*Russell, E. R. . .	L	Glasgow, Bridgeton
*Jacoby, J. A. . . .	L	Derbyshire, Mid	Ryland, P.	L	Burnley
*James, C. H. . . .	L	Merthyr Tydvil	*Salis-Schwabe,		
*James, Sir H. . . .	L	Bury	Col.	L	Lanc., Middleton
*Jardine, Sir R. . .	L	Dumfries-shire	*Seely, C., Jun. . .	L	Nottingham, West
Jenkins, D. J. . . .	L	Penryn and Falmouth	*S' rley, W. S. . . .	L	Yorks, W.R. (South),
*Johns, J. W. . . .	L	Warwicks., Nun'aton			Doncaster
*Joicey, J.	L	Durham, C-le-Street	Simon, Serjeant .	L	Dewsbury
Kay-Shuttleworth,			Spencer, Hon. C. .	L	
Sir U.	L	Lanc., N.E., Clitheroe			Northamptonsh., Mid.
*Kenny, C. S. . . .	L	Yorks, W.R., South	*Spensley, H. . . .	L	Finsbury, Central
		Barnsley	*Spicer, H.	L	Islington, South
*Kilcoursie, Visct.	L	Somersetsh., Yeovil	Stansfield, J. . . .	L	Halifax
*Kinnear, J. B. . .	L	Fifeshire, East	Stevenson, J. C. .	L	South Shields
Labouchere, H. . .	L	Northampton	Storey, S.	L	Sunderland
*Lawson, H. W. . .	L	St. Pancras, West	*Strong, R.	L	Camberwell, North
Leake, R.	L	Lanc., S.E., Radcliffe-	Stuart, J.	L	Shoreditch, Hoxton
		cum-Farnworth	Sutherland, T. . .	L	Greenock
Leatham, E. A. . .	L	Huddersfield	Tennant, Sir C. . .	L	Peebles and Selkirk
*Leicester, J. . . .	L	West Ham, South	Trevelyan, G. O. .	L	Harwick
*Lockwood, F. . .	L	York	*Vanderbyl, P. . .	L	Portsmouth
*Lubbock, Sir J. .	L	London University	*Waring, Col. . . .	C	Down, North

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Wason, E. . . .	L	Ayrshire, South	*Cobb, H. P. . .	L	Warwickshire, S.E., or Rugby
*Wayman, T. . .	L	Yorks, W.R. (North), Elland	*Coleridge, Hon. B.	L	Sheffield, Attercliffe
*Westlake, J. . .	L	Essex, Romford	Collings, Jesse .	L	Ipswich
*Weston, J. D. . .	L	Bristol, South	Colman, J. . . .	L	Norwich
Wiggin, H. . . .	L	Staffs., Handsworth	*Conybeare, C.A.V.	L	Cornwall, North-west
*Williams, J. C. .	L	Nottingham, South	*Corbett, A. C. .	L	Glasgow, Tradeston
*Williams, J. P. .	L	Birmingham, South	*Cosham, H. . .	L	Bristol, East
Wilson, I. . . .	L	Middlesbrough	Cowen, J. . . .	L	Newcastle-on-Tyne
*Wilson, J. . . .	L	Durham, Houghton- le-Spring	Craig-Sellar, A. .	L	Lanarkshire, Patrick
*Wilson, J. . . .	L	Edinburgh, Central	*Craven, J. . . .	L	Yorkshire, Shipley
Wilson, Sir M. .	L	Yorks, W.R. (North), Skipton	*Crawford, D. . .	L	Lanarkshire, N.E.
*Winterbotham, L.	L	Glo'ster, Cirencester	*Crawford, W. . .	L	Durham, Mid
*Wolmer, Viscount	L	Hants, Petersfield	*Cremier, W. R. .	L	Shoreditch, Hagger- ston
Woodall, W. . .	L	Hanley	*Crompton, C. . .	L	Staffordshire, Leek
*Woodhead, J. . .	L	Yorks, W.R. (East), Spen Valley	*Crossley, E. . .	L	Yorks, W.R., Sowerby
*Wright, C. . . .	L	Lanc., S.W., Leigh	*Crossman, Sir W.	L	Portsmouth
*Yeo, F. A. . . .	L	Glamorgansh., Gower	Dillwyn, L. L. .	L	Swansea Town
Church Disestablishment. Alphabetical List of Members of the House of Commons in favour of. (Compiled from "The Popular Guide to the New House of Commons.")					
*Abraham, W. . .	L	Glamorgan, Rhondda	*Farquharson, Dr. R.	L	Aberdeenshire, West
*Acland, A. H. D.	L	Yorkshire, Rotherham	*Fenwick, C. . .	L	Northumb., Wansbeck
Acland, C. T. D. .	L	Cornwall, Launceston	*Ferguson, J. E. J.	L	Leic., Mid., Loughboro'
Agnew, W. . . .	L	Lancashire, Stretford	*Finlayson, J. . .	L	Renfrewshire, East
Allen, W. S. . . .	L	Newcastle-under-Lyne	Flower, C. . . .	L	Bedfordshire, Luton
*Arch, Joseph . .	L	Norfolk, North-west	Fry, L.	L	Bristol, North
Armitage, B. . .	L	Salford, West	*Glyn, Hon. G. P.	L	Dorsetshire, East
Asher, A. . . .	L	Elgin District	Goldsmith, Sir J.	L	St. Pancras, South
*Atherley-Jones, L.	L	Durham, North-west	Goschen, G. J. .	L	Edinburgh, East
Baird, J.	C	Lanarkshire, N.W	Gourley, E. T. .	L	Sunderland
Balfour, J. B. . .	L	Clackmannan & Kin-	*Haldane, R. B. .	L	Haddingtonshire
*Barbour, W. B. .	L	Paisley [ross	*Harker, W. . .	L	Yorks, W.R., E., Ripon
Barclay, J. W. .	L	Forfarshire	Havelock - Allen,		
Barnes, A. . . .	L	Derbysh., Chesterfld.	Genl. Sir H. . .	L	Durham, South-east
*Beaumont, H. F.	L	Yorkshire, W.R., S., Colne Valley Div.	Henry, M. . . .	L	Glasgow, Blackfriars
*Beith, G. . . .	L	Glasgow, Central	Holden, I. . . .	L	Yorks, W.R., North Keighley
*Bennett, J. . . .	L	Linc., W., Gainsboro'	Holland, Sir H. .	C	Hampstead
*Blades, J. H. . .	L	West Bromwich	*Hoyle, J. . . .	L	Lancashire, Heywood
*Blake, T. . . .	L	Glo'ster, Forest Dean	*Hunter, Dr. W. A.	L	Aberdeen, North
Bolton, I. C. . . .	L	Stirlingshire	Illingworth, A. .	L	Bradford, West
*Bolton, T. H. . .	L	St. Pancras, North	Ince, H. B. . . .	L	Islington, East
Borlase, W. C. . .	L	Cornwall, St. Austell	*Jacks, W. . . .	L	Leith Burghs
Bradlaugh, C. . .	L	Northampton	*Jacoby, J. A. . .	L	Derbyshire, Mid
Bright, John . .	L	Birmingham, Central	James, C. H. . .	L	Merthyr Tydvil
Broadhurst, H. .	L	Birmingham, Bordesley	Jenkins, Sir J. J.	L	Carmarthen District
Bruce, Hon. R. P.	L	Fifehire, West	*Johns, J. W. . .	L	Warwicks., Nuneaton
*Brunner, J. T. .	L	Cheshire, Northwich	*Joicy, J. . . .	L	Durham, C.-le-Street
Bryce, J.	L	Aberdeen, South	*Kenrick, W. . .	L	Birmingham, North
*Buckley, A. . .	L	Lanc., S.E., Prestwich	*Kinneir, J. B. .	L	Fifehire, East
Cameron, Dr. C. .	L	Glasgow, Coll. Div.	*Kitching, A. G. .	L	Essex, Maldon
Cameron, J. McD.	L	Wick District	Labouchere, H. .	L	Northampton
Campbell, Sir G. .	L	Kirkcaldy District	*Lacaita, C. C. .	L	Dundee
Campbell, R. F. F.	L	Ayr Burghs	*Latham, G. W. .	L	Cheshire, Crewe
Campbell-Banner-			*Lawson, H. W. .	L	St. Pancras, West
man, H.	L	Stirling	Leake, R. . . .	L	Lancashire, S.E., Rad- cliffe-cum-Farnworth
*Chamberlain, J. .	L	Birmingham, West	Leatham, E. A. .	L	Huddersfield
*Chamberlain, R. .	L	Islington, West	*Leveson-Gower, G.	L	Staffordshire, N.W.
*Channing, F. A. .	L	Northamptonshire, E.	McArthur, A. . .	L	Leicester
*Clark, Dr. G. B. .	L	Caithness			

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
M'Culloch, J. . . .	L	Glasgow, St. Rollox	Wilson, I. . . .	L	Middlesbrough
Macdonald, R. . . .	L	Ross & Cromarty cos.	*Wilson, J. . . .	L	Durham, Houghton-le-Spring
Macfarlane, D. H. . . .	L	Argyllshire			Edinburgh, Central
MacIver, L. . . .	L	Devonshire, Torquay	*Wilson, J. . . .	L	
Marjoribanks, Hon. E. . . .	L	Berwickshire	*Winterbotham, A. B. . . .	L	Glo'ster, Cirencester
Mason, S. . . .	L	Lanarkshire, Mid			Hanley
Mather, W. . . .	L	Salford, South	Woodall, W. . . .	L	Lanc., S.W., Leigh
Menzies, R. S. . . .	L	Perthshire, East	Wright, C. . . .	L	Glamorgansh., Gower
Milnes-Gaskell, C. . . .	L	Yorks, W.R. (South), Morley	*Yeo, F. A. . . .	L	
Montagu, S. . . .	L	Whitechapel	House of Lords, Abolition of. Alphabetical		
Morgan, G. O. . . .	L	Denbighshire, East	List of Members of the House of Commons in		
Morgan, O. V. . . .	L	Battersea	favour of. (Compiled from the "Popular Guide		
Morley, A. . . .	L	Nottingham, East	to the New House of Commons.")		
Morley, J. . . .	L	Newcastle-on-Tyne	*Abraham, W. . . .	L	Glamorgan, Rhondda
Moulton, J. F. . . .	L	Clapham	Agnew, W. . . .	L	Lancashire, Stretford
Noel, E. . . .	L	Dumfries Burghs	*Allison, R. A. . . .	L	Cumberland, Eskdale
Paget, T. T. . . .	L	Leicestersh., Harboro'	Armitage, B. . . .	L	Salford, West
Parker, C. S. . . .	L	Perth	Barclay, J. W. . . .	L	Forfarshire
Pease, Sir J. W. . . .	L	Durham, Barnard Castle	*Bennett, J. . . .	L	Linc., W., Gainsboro'
Pease, H. F. . . .	L	Yorks, N.R., Clevl'nd	*Blake, T. . . .	L	Glo'ster, Forest Dean
Picton, J. A. . . .	L	Leicester	*Bolton, T. H. . . .	L	St. Pancras, North
Priestly, B. . . .	L	Yorks, W.R. (East), Pudsey	Borlase, W. C. . . .	L	Cornwall, St. Austell
Pugh, D. . . .	L	Carmarthenshire, E.	Bradlaugh, C. . . .	L	Northampton
Quilter, W. C. . . .	L	Suffolk, Sudbury	Bright, John . . .	L	Birmingham, Central
Ramsay, J. . . .	L	Falkirk District	*Brunner, J. T. . . .	L	Cheshire, Northwich
Reed, Sir E. J. . . .	L	Cardiff	Burt, T. . . .	L	Morpeth
Rendel, S. . . .	L	Montgomeryshire	*Cameron, J. McD.	L	Wick District
Richard, H. . . .	L	Merthyr Tydvil	Campbell, Sir G.	L	Kirkcaldy District
Roberts, J. . . .	L	Fliint Boroughs	Campbell-Banner-		
Roberts, J. . . .	L	Carnarvonshire, S.	man, H. . . .	L	Stirling
Robertson, E. . . .	L	Dundee	Chamberlain, J. . . .	L	Birmingham, West
Robertson, H. . . .	L	Merionethshire	*Chamberlain, R. . . .	L	Islington, West
Robson, W. S. . . .	L	Bow and Bromley	*Coleridge, Hon. B.	L	Sheffield, Attercliffe
roe, T. . . .	L	Derby	Collings, Jesse . . .	L	Ipswich
roscoe, Sir H. . . .	L	Manchester, South	*Conybeare, C. A. . . .	L	Cornwall, North-west
Rothschild, Baron F. de	L	Bucks, Aylesbury	*Cook, E. R. . . .	L	West Ham, North
tussell, C. . . .	L	Hackney, South	*Cosham, H. . . .	L	Bristol, East
tussell, E. R. . . .	L	Glasgow, Bridgeton	Cowen, J. . . .	L	Newcastle-on-Tyne
tuston, J. . . .	L	Lincoln	*Cremer, W. R. . . .	L	Shoreditch, Hagger-
t. Aubyn, Sir J. . . .	L	Cornwall, W., S. Ives			ston
amuelson, Sir B. . . .	L	Oxfordsh., Banbury	*Crompton, C. . . .	L	Staffordshire, Leek
arley, W. S. . . .	L	Yorks, W.R. (South), Doncaster	*Crossman, Sir W.	L	Portsmouth
mith, W. Bickford	L	Cornwall, Truro	Dilke, Sir C. . . .	L	Chelsea
picer, H. . . .	L	Islington, South	Dillwyn, L. L. . . .	L	Swansea Town
tafford, Marquis of	L	Sutherlandshire	Dixon, G. . . .	L	Birm'gham, Edgbaston
tores, S. . . .	L	Sunderland	Duckham, T. . . .	L	Herefordsh, Leomin-
trong, R. . . .	L	Camberwell, North	*Durant, T. C. . . .	L	Stepney [ster
turgis, H. P. . . .	L	Dorsetshire, South	*Ferguson, R. . . .	L	Carlisle
utherland, T. . . .	L	Greenock	*Finlayson, J. . . .	L	Renfrewshire, East
winburne, Sir J. . . .	L	Stafford, Lichfield	Fraser-Mackint'sh	L	Inverness-shire
thomas, A. . . .	L	Glamorganshire, East	*Gibb, T. E. . . .	L	St. Pancras, East
revelyan, G. O. . . .	L	Hawick	*Goldsmid, Sir J. . . .	L	St. Pancras, South
ason, E. . . .	L	Ayrshire, South	Gourley, E. T. . . .	L	Sunderland
att, H. . . .	L	Glasgow, Camlachie	*Grove, Sir F. T. . . .	L	Wiltshire, Wilton
ayman, T. . . .	L	Yorks, W.R. (North), Elland	Hibbert, J. T. . . .	L	Oldham
est, Cornwallis	L	Denbighshire, West	*Howell, G. . . .	L	Bethnal Green, N.E.
ill, J. Shiress	L	Montrose District	*Hunter, Dr. W. A. . . .	L	Aberdeen, North
illiams, A. J. . . .	L	Glamorganshire, S.	Ince, H. B. . . .	L	Islington, East
illiams, J. C. . . .	L	Nottingham, South	Jenkins, Sir J. J. . . .	L	Carmarthen District
illiamson, S. . . .	L	St. Andrew's Burghs	*Johns, J. W. . . .	L	Warwicks., Nuneaton
ilson, H. J. . . .	L	Yorks, W.R. (South), Holmfirth	*Kenrick, W. . . .	L	Birmingham, North
			*Kinnear, J. B. . . .	L	Fifeshire, East
			Labouchere, H. . . .	L	Northampton
			*Lawson, H. W. . . .	L	St. Pancras, West
			*Leicester, J. . . .	L	West Ham, South
			*MacIver, L. . . .	L	Devonshire, Torquay
			McLaren, C. B. B. . . .	L	Stafford
			*Montagu, S. . . .	L	Whitechapel

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Morley, A. . . .	L	Nottingham, East	Burt, T. . . .	L	Morpeth
Morley, J. . . .	L	Newcastle-on-Tyne	*Buxton, E. N. . . .	L	Essex, South-west
*Moulton, J. F. . . .	L	Clapham	Byrne, G. M. . . .	P	Wicklow, West
O'Connor, T. P. . . .	P	Liverpool, Scotland Division	Cameron, Dr. C. . . .	L	Glasgow, Coll. Div.
*Pickersgill, E. H. . . .	L	Bethnal Green, S.W.	*Cameron, J. McD. . . .	L	Wick District
Picton, J. A. . . .	L	Leicester	*Campbell, Sir A. . . .	C	Renfrewshire, West
Powell, W. R. H. . . .	L	Cardmarthenshire, W.	Campbell, Sir G. . . .	L	Kirkcaldy District
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Richard, H. . . .	L	Merthyr Tydvil	Campbell, J. A. . . .	C	Glasgow & Aberdeen University
*Robson, W. S. . . .	L	Bow and Bromley	Campbell, R. F. F. . . .	L	Ayr Burghs
Roe, T. . . .	L	Derby	Campbell-Bannerman, H. . . .	L	Stirling
Rogers, J. E. T. . . .	L	Bermondsey	Carbutt, E. H. . . .	L	Monmouth District
Russell, Sir C. . . .	L	Hackney, South	Cavendish, Lord E. . . .	L	Derbyshire, West
*Russell, E. R. . . .	L	Glasgow, Bridgeton	Chamberlain, J. . . .	L	Birmingham, West
*Saunders, W. . . .	L	Hull, East	*Chamberlain, R. . . .	L	Islington, West
Sheridan, H. B. . . .	L	Dudley	*Channing, F. A. . . .	L	Northamptonshire, I
*Spensley, H. . . .	L	Finbury, Central	*Cobain, E. S. W. . . .	C	Belfast, East
*Spicer, H. . . .	L	Islington, South	*Cobb, H. P. . . .	L	Warwickshire, South-east, or Rugby
Storey, S. . . .	L	Sunderland	Cohen, A. . . .	L	Southwark, West
*Strong, R. . . .	L	Camberwell, North	*Coleridge, Hon. B. . . .	L	Sheffield, Attercliffe
Stuart, J. . . .	L	Shoreditch, Hoxton	Collings, Jesse . . .	L	Ipswich
*Vanderbyl, P. . . .	L	Portsmouth	Colman, J. . . .	L	Norwich
West, H. W. . . .	L	Ipswich	*Compton, Lord W. . . .	L	Warwickshire, Stratford-on-Avon
*Westlake, J. . . .	L	Essex, Romford	*Conybeare, C. A. . . .	L	Cornwall, North-west
Woodall, W. . . .	L	Hanley	V. . . .	L	West Ham, North
*Yeo, F. A. . . .	L	Glamorgansh., Gower	*Cook, E. R. . . .	L	Birmingham, East
			*Cook, W. . . .	L	Huntingdonshire, S.
			*Coote, T., Jun. . . .	L	Glasgow, Tradeston
			*Corbett, A. C. . . .	L	Bristol, East
			*Cosham, H. . . .	L	Cornwall, Bodmin
			Courtney, L. H. . . .	L	Newcastle-on-Tyne
			Cowen, J. . . .	L	Norfolk, North
			*Cozens-Hardy, H. . . .	L	Lanarkshire, Partick
			Craig-Sellar, A. . . .	L	Yorkshire, Shipley
			*Craven, J. . . .	L	Lanarkshire, N.E.
			*Crawford, D. . . .	L	Shoreditch, Hagston
			*Cremer, W. R. . . .	L	Staffordshire, Leek
			*Crompton, C. . . .	L	Yorkshire, W.R., Sowerby
			*Crossley, E. . . .	L	Suffolk, Lowestoft
			*Crossley, Sir S. . . .	L	Portsmouth
			*Crossman, Sir W. . . .	L	Perthshire, West
			Currie, Sir D. . . .	L	Anglesea
			Davies, R. . . .	L	Pembrokeshire
			Davies, W. . . .	L	Chelsea
			Dilke, Sir C. . . .	L	Swansea Town
			Dillwyn, L. L. . . .	L	Birmingham, Edgbast
			Dixon, G. . . .	L	Stockton
			Dodds, J. . . .	L	Tynemouth
			*Donkin, R. S. . . .	C	Hereford, Leominster
			Duckham, T. . . .	L	Stepney
			*Durant, J. C. . . .	L	Devonshire, West
			Ebrington, Lord . . .	L	Derbyshire, N.E.
			Egerton, Adml. F. . . .	L	Roxburghshire
			Elliot, Hon. A.R.D. . . .	L	Notts, Rushcliffe
			*Ellis, J. E. . . .	L	Aberdeenshire, East
			*Esselement, P. . . .	L	Suffolk, South-east
			*Everett, R. L. . . .	L	Woodbridge
			Ewart, W. . . .	C	Belfast, North
			Farquharson, Dr. R. . . .	L	Aberdeenshire, West
			*Fenwick, C. . . .	L	Northumb., Wansbeck

Local Option. Alphabetical List of Members of the House of Commons in favour of. (Compiled from "The Popular Guide to the New House of Commons.")

*Abraham, W. . . .	L	Glamorgan, Rhondda
*Acland, A. H. D. . . .	L	Yorks, Rotherham
Acland, C. T. D. . . .	L	Cornwall, Launceston
Acland, Sir T. D. . . .	L	Somerset, Wellington
Agnew, W. . . .	L	Lancashire, Stretford
Akers-Douglas, A. . . .	C	Kent, E., or S. August.
Allen, H. G. . . .	L	Pembroke Boroughs
Allen, W. S. . . .	L	Newcastle-under-Lyne
*Allison, R. A. . . .	L	Cumberland, Eskdale
*Arch, Joseph	L	Norfolk, North-west
Armitage, B. . . .	L	Salford, West
Asher, A. . . .	L	Elgin District
*Ashton, T. G. . . .	L	Cheshire, Hyde
*Atherley-Jones L. . . .	L	Durham, North-west
*Baker, L. J. . . .	L	Somersetshire, Frome
Balfour, J. B. . . .	L	Clackmannan & Kinross
*Barbour, W. B. . . .	L	Paisley
*Beith, G. . . .	L	Glasgow, Central
*Bickersteth, R. . . .	L	Shropshire, Newport
Biddulph, M. . . .	L	Herefordshire, Ross
*Blades, J. H. . . .	L	West Bromwich
*Blake, T. . . .	L	Glo'ster, Forest Dean
Bolton, J. C. . . .	L	Stirlingshire
*Bolton, T. H. . . .	L	St. Pancras, North
Bradlaugh, C. . . .	L	Northampton
Brassey, Sir T. . . .	L	Hastings
Bright, John	L	Birmingham, Central
*Bright, W. L. . . .	L	Stoke-upon-Trent
Broadhurst, H. . . .	L	Birmingham, Bordesley
*Brooklehurst, W. . . .	L	Cheshire, Macclesfield
Bruce, Hon. R. P. . . .	L	Fifehire, West
*Brunner, J. T. . . .	L	Cheshire, Northwich
Bryce, J. . . .	L	Aberdeen, South
Buchanan, T. R. . . .	L	Edinburgh, West

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Ferguson, J. E. J.	L	Leicestershire, Mid	Jones-Parry, T. D.	L	Carnarvon Boroughs
Ferguson, R. . . .	L	Loughborough	*Jordan, J. . . .	P	Clare, West
*Finlay, R. B. . . .	L	Carlisle	*Kenney, C. S. . . .	L	Yorks, W.R. (South), Barnsley
*Finlayson, J. . . .	L	Inverness	*Kenrick, W. . . .	L	Birmingham, North
*Fletcher, B. . . .	L	Renfrewshire, East	*Ker, Captain . . .	C	Down, East
Flower, C. . . .	L	Wilts, Chippenham	*Kinnear, J. B. . .	L	Fifeshire, East
Foljambe, C. G. S.	L	Bedfordshire, Luton	Labouchere, H. . .	L	Northampton
Forster, Sir C. . .	L	Notts, Mansfield	*Lacaita, C. C. . .	L	Dundee
Forster, W. E. . .	L	Walsall	*Latham, G. W. . .	L	Cheshire, Crewe
*Foster, Dr. B. W.	L	Bradford, Central	*Lawson, H. W. . .	L	St. Pancras, West
Fowler, H. H. . .	L	Chester	Leatham, E. A. . .	L	Huddersfield
Fraser-Mackintosh	L	Wolverhampton, East	*Leicester, J. . . .	L	West Ham, South
Fry, L.	L	Inverness-shire	*Lethbridge, Sir R.	C	Kensington, North
Fry, T.	L	Bristol, North	Lewis, C. E. . . .	C	Londonderry City
*Fuller, G. P. . .	L	Darlington	*Lockwood, F. . .	L	York
Gardner, R. R. . .	C	Wilts, W., or West-	Lymington, Lord	L	Devonshire, S. Molton
*Gibb, T. E. . . .	L	Windsor [bury	McArthur, A. . . .	L	Leicester
Gladstone, H. . .	L	St. Pancras, East	*M'Calmont, J. . .	C	Antrim, East
Gladstone, W. E.	L	Leeds, West	*M'Culloch, J. . .	L	Glasgow, St. Rollox
*Glyn, Hon. G. P.	L	Midlothian	*Macdonald, R. . .	L	Ross & Cromarty cos.
*Goldsmid, Sir J.	L	Dorsetshire, East	Macfarlane, D. H.	L	Argyllshire
Goschen, G. J. . .	L	St. Pancras, South	*MacIver, L. . . .	L	Devonshire, Torquay
Gourley, E. T. . .	L	Edinburgh, East	*McKane, J. . . .	C	Armagh, Mid
Grafton, F. W. . .	L	Sunderland	McLagan, P. . . .	C	Linlithgowshire
Grant, Sir G. McP.	L	Lanc., N.E., Accring'tn	Macnaghten, E. . .	C	Antrim, North
*Green, H.	L	Elgin and Nairn	Magniac, C. . . .	L	Bedfordshire, North
Grenfell, W. H. . .	L	Poplar	Mappin, F. T. . .	L	Yorks, W.R. (South), Hallamshire
Grey, A. H. G. . .	L	Safisbury			
Grey, Sir E. . . .	L	Northumb., Tyneside	Marjoribanks,		
		Northumb., Berwick-	Hon. E.	L	Berwickshire
		on-Tweed	Marriott, W. . . .	C	Brighton
Grove, Sir F. T. .	L	Wiltshire, Wilton	Maskelyne, Prof.		
Gurdon, R. T. . .	L	Norfolk, Mid	S.	L	Wiltshire, Cricklade
Haldane, R. B. . .	L	Haddingtonshire	*Mason, S.	L	Lanarkshire, Mid
Hamilton, J. G. C.	L	Lanarkshire, South	*Mather, W.	L	Salford, South
Harcourt, Sir W. V.	L	Derby (Ripon)	Maxwell, Sir H. E.	C	Wigtownshire
Harker, W.	L	Yorks, W.R. (East)	Mellor, Sir J. W. .	L	Grantham
Hartington, Mar-		Lancashire, North-	*Menzies, R. S. . .	L	Perthshire, East
quis of	L	east, Rossendale	Milbank, Sir F. A.	L	Yorks, N.R., Richm.
Haslett, J. H. . .	C	Belfast, West	*Milnes-Gaskell, C.	L	Yorks, W.R. (South), Morley
Hastings, G. W. .	L	Worcestershire, East			
Havelock - Allan,			*Montagu, S. . . .	L	Whitechapel
Gen. Sir H. . . .	L	Durham, South-east	Morgan, G. O. . .	L	Denbighshire, East
Heneage, E. . . .	L	Grimby	*Morgan, O. V. . .	L	Battersea
Henry, M.	L	Glasgow, Blackfriars	Morley, A.	L	Nottingham, East
Hibbert, J. T. . .	L	Oldham	Morley, J.	L	Newcastle-on-Tyne
Hill, Lord A. . . .	C	Down, West	*Moulton, J. F. . .	L	Clapham
Hingley, B. . . .	L	Worcestershire, N.	*Mulholland, H. L.	C	Londonderry, North
Hobhouse, H. . .	L	Somersetshire, East	Mundella, A. J. . .	C	Sheffield, Brightside
Holden, A.	L	Bradford, East	*Murdoch, C. T. .	C	Reading
Holden, I.	L	Yorks, W.R., North	*Newnes, G.	L	Cambridgeshire, East
		Keighley	Noel, E.	L	Dumfries Burghs
Howell, G.	L	Bethnal Green, N.E.	*O'Doherty, J. E. .	P	Donegal, North
Hoyle, I.	L	Lancashire, Heywood	Otter, F.	L	Lincolnshire, South
Hunter, Dr. W. A.	L	Aberdeen, North	Palmer, C. M. . . .	L	Durham, Jarrow
Hlingworth, A. . .	L	Bradford, West	Parker, C. S. . . .	L	Perth
Ince, H. B.	L	Islington, East	*Paulton, J. M. . .	L	Durham, Bp. Auck.
Ingram, W. J. . .	L	Boston	*Peacock, R. . . .	L	Lancashire, Gorton
Jacks, W.	L	Leith Burghs	*Pease, A. E. . . .	L	York
Jacoby, J. A. . . .	L	Derbyshire, Mid	Pease, Sir J. W. . .	L	Durham, Barnard Castle
James, C. H. . . .	L	Merthyr Tydvil			
James, Sir H. . . .	L	Bury	*Pease, H. F. . . .	L	Yorks, N.R., Clevel'nd
James, Hon. W. H.	L	Gateshead	Peel, A. W.	L	Warwick & Leaming'tn
Jardine, Sir R. . .	L	Dumfries-shire	*Pickard, B.	L	Yorks, Normanton
Jenkins, D. J. . . .	L	Penryn and Falmouth	*Pickersill, E. H.	L	Bethnal Green, S.W.
Jenkins, Sir J. J.	L	Carmarthen District	Picton, J. A. . . .	L	Leicester
Johns, J. W. . . .	L	Warwicksh., Nuneat'n	*Pilkington, Dr. G.	L	Lanc., Southport
Johnston, W. . . .	C	Belfast, South	*Pitt-Lewis, G. . .	L	Devonshire, N.W.
Joicey, J.	L	Durham, C-le-Street	Playfair, Sir L. . .	L	Leeds, South
Jones, P.	C	Montgomery District			

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Potter, T. B. . . .	L	Rochdale	Vivian, Sir H. H.	L	Swansea District
*Priestly, B. . . .	L	Yorks W.R. (East), Pudsey	*Waring, Col. . . .	C	Down, North
Pugh, D.	L	Carmarthenshire, E.	Warrington, C.M.	L	Monmouthshire, West
*Quilter, W. C. . .	L	Suffolk, Sudbury	*Wason, E.	L	Ayrshire, South
Ramsay, J.	L	Falkirk District	*Watkin, Sir E. . .	Ind.	Hythe
*Ramsden, Sir J. .	L	Yorks, W.R. (East), Osgoldcross	*Watson, T.	L	Derbyshire, Ilkestone
Rathbone, W. . . .	L	Carnarvon, Arvon	*Watt, H.	L	Glasgow, Camlachie
Reed, Sir E. J. . .	L	Cardiff	*West, Cornwallis	L	Denbighshire, West
*Reid, H. G.	L	Aston Manor	West, H. W.	L	Ipswich
*Reynolds, W. J. .	P	Tyrone, East	*Westlake, J. . . .	L	Essex, Romford
Richard, H.	L	Merthyr Tydvil	*Weston, J. D. . . .	L	Bristol, South
Richardson, T. . .	L	Hartlepool	Whitbread, S. . . .	L	Bedford
*Rigby, J.	L	Cambs., Wisbeach	Wiggin, H.	L	Staffs., Handsworth
Roberts, J.	L	Flint Boroughs	*Will, J. Shiress . .	L	Montrose District
*Roberts, J.	L	Carnarvonshire, South	*Williams, J. C. . .	L	Nottingham, South
*Robertson, E. . .	L	Dundee	*Williams, J. P. . .	L	Birmingham, South
*Robertson, H. . .	L	Merionethshire	Wilson, C. H. . . .	L	Hull, West
*Robinson, T. . . .	L	Gloucester	*Wilson, H. J. . . .	L	Yorks, W.R. (South), Holmfirth
*Robson, W. S. . .	L	Bow and Bromley	Wilson, I.	L	Middlesbrough
Roe, T.	L	Derby	*Wilson, J.	L	Durham, Houghton- le-Spring
Rogers, J. E. T. . .	L	Bermondsey	*Winterbotham, A.	L	Glo'ster, Cirencester
*Roscoe, Sir H. . .	L	Manchester, South	Wodehouse, E. R. .	L	Bath
Rothschild, Baron	L	Bucks, Aylesbury	Woodall, W.	L	Hanley
F. de	L	Hackney, South	*Woodhead, J. . . .	L	Yorks, W.R. (East), Spen Valley
Russell, Sir C. . . .	L	Glasgow, Bridgeton	*Wright, C.	L	Lanc., S.W. Leigh
Russell, E. R. . . .	L	Lincoln	*Yeo, F. A.	L	Glamorgansh., Gower
Ruston, J.	L	Burnley			
Rylands, P.	L	Cornwall, W., St. Ives			
St. Aubyn, Sir J. .	L				
*Salis-Schwabe, . .	L	Lanc., Middleton			
Col.	L	Oxfordshire, Banbury			
Samuelson, Sir B. .	L	Hull, East			
*Saunders, W. . . .	C	Armagh, North			
*Saunderson, Major	L	Devon, Ashburton			
*Seale-Hayne, C. . .	L	Nottingham, West			
Seely, C., Jun. . . .	L	Halifax			
Shaw, T.	L	Dudley			
Sheridan, H. B. . .	L	Yorks, W.R. (South), Doncaster			
*Shirley, W. S. . .	L	Dewsbury			
Simon, Serjeant . .	L	Cornwall, Truro			
*Smith, W. B. . . .	L	Northamptonsh., Mid.			
Spencer, Hon. C.R.	L	Finsbury, Central			
*Spensley, H. . . .	L	Islington, South			
*Spicer, H.	L	Sutherlandshire			
Stafford, Marquis	L	Halifax			
of	L	Suffolk, Eye			
Stansfield, J. . . .	L	South Shields			
*Stevenson, F. S. .	L	Kircudbrightshire			
Stevenson, J. C. . .	C	Sunderland			
Stewart, M. J. . . .	L	Camberwell, North			
Storey, S.	L	Shoreditch, Hoxton			
*Strong, R.	L	Dorsetshire, South			
Stuart, J.	L	Kilmarnock			
*Sturgis, H. P. . .	C	Dublin City, Coll. Grn.			
*Sturrock, P. . . .	P	Greenock			
Sullivan, T. D. . . .	L	Stafford, Lichfield			
Sutherland, T. . . .	L	Glamorganshire, Mid			
*Swinburne, Sir J. .	L	Worcester., Evesham			
Talbot, C. R. M. . .	C	Lincolnshire, North			
*Temple, Sir R. . .	L	Lindsay or Brigg			
*Thompson, Sir H. .	L	Hawick			
Trevelyan, G. O. . .	C	Cumb., Cockermouth			
*Valentine, C. J. . .	L	Portsmouth			
*Vanderbyl, P. . . .	L	Buckinghamshire, N.			
*Verney, Capt. E.H.	L				

London Reform, Alphabetical List of Members of the House of Commons in favour of.

Agnew, W.	L	Lancashire, Stretford
Armitage, B. . . .	L	Salford, West
Barclay, J. W. . .	L	Forfarshire
*Bennett, J.	L	Linc., W., Gainsboro'
Blake, T.	L	Glo'ster, Forest Dean
Bolton, T. H. . . .	L	St. Pancras, North
Borlase, W. C. . .	L	Cornwall, St. Asaph
Brand, Hon. H. R.	L	Gloucestersh., Stroud
Bright, John . . .	L	Birmingham, Central
*Bright, W. L. . . .	L	Stoke-on-Trent
Bruce, Hon. R. P.	L	Fifehire, West
Bryce, J.	L	Aberdeen, South
Burt, T.	L	Morpeth
*Buxton, E. N. . . .	L	Essex, S.W.
Cameron, Dr. C. . .	L	Glasgow, Coll. Div.
Carbutt, E. H. . . .	L	Monmouth District
*Channing, F. A. . .	L	Northamptonshire, E.
*Clark, Dr. G. B. . .	L	Caithness
Cohen, A.	L	Southwark, West
Collings, Jesse. . .	L	Ipswich
Commins, A.	P	Roscommon, S.
*Conybeare, C. A. .	L	Cornwall, North-west
*Cosham, H.	L	Bristol, East
Craig-Sellar, A. . .	L	Lanarkshire, Partick
*Cremer, W. R. . . .	L	Shoreditch, Haggerston
Dilke, Sir C.	L	Chelsea
Dillwyn, L. L. . . .	L	Swansea Town
Dodds, J.	L	Stockton
Duff, R. W.	L	Banffshire
*Duncan, Col.	C	Holborn
*Durant, J. C. . . .	L	Stepney
Fairbairn, Sir A. . .	L	Yorks, W.R. (East), Otley

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MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Cotton, Capt. E. T.	C	Cheshire, Wirral	Hill, A. Staveley.	C	Staff., Kingswinford
Courtney, L. H.	L	Cornwall, Bodmin	Holden, I.	L	Yorks, W.R., North
Cowen, J.	L	Newcastle-on-Tyne			Keighley
*Crawford, W.	L	Durham, Mid	Holland, Sir H.	C	Hampstead
*Crossley, E.	L	Yorks, W.R., Sowerby	Houldsworth, W.	C	Manchester, N.W.
*Crossman, Sir W.	L	Portsmouth	*Howell, G.	L	Bethnal Green, N.E.
Cubitt, G.	C	Surrey, Epsom	*Hughes, E.	C	Woolwich
*Curzon, Lord	C	Bucks, Wycombe	*Hunter, Sir G.	C	Hackney, Central
Davies, D.	L	Cardiganshire	*Hunter, Dr. W. A.	L	Aberdeen, North
Dickson, A. G.	C	Dover	*Hutton, J. F.	C	Manchester, North
Dilke, Sir C.	L	Chelsea	Illingworth, A.	L	Bradford, West
Dillwyn, L. L.	L	Swansea Town	Ince, H. B.	L	Islington, East
Dimasdale, Baron.	C	Herts, Hitchin	*Ingram, W. J.	L	Boston
*Dixon, G.	L	Birm'gham, Edgbast'n	*Isaacs, L. H.	C	Walworth
Dixon-Hartland, F.	C	Middlesex, Uxbridge	*Jackson, W. L.	C	Leeds, North
Dodds, J.	L	Stockton	*Jacoby, J. A.	L	Derbyshire, Mid
*Donkin, R. S.	C	Tynemouth	*Jenkins, D. J.	L	Penryn and Falmouth
*Duncan, Col.	C	Holborn	*Jenkins, Sir J. J.	L	Carmarthen District
*Duncombe, A.	C	Yorks, E.R., Howden-	*Jennings, L. J.	C	Stockport
*Durant, J. C.	L	Stepney [shire	*Johns, J. W.	L	Warwicksh., Nuneat
Eaton, H. W.	C	Coventry	*Johnston, W.	C	Belfast, South
*Edwardes-Moss, T.	C	Lanc., S.W., Widnes	*Kennaway, Sir J.	C	Devonshire, Honiton
*Egerton, Hon. A.	C	Lancashire, Eccles	*Kenny, C. S.	L	Yorks, W.R., South
*Ellis, J. E.	L	Notts, Rushcliffe			Barnsley
*Esselmont, P.	L	Aberdeenshire, East	*Kenyon, Hon. G.	C	Denbigh Boroughs
*Everett, R. L.	L	Suffolk, S.E., Wood-	King-Harman, Col.	C	Kent, Isle of Thanet
Ewart, W.	C	Belfast, N. [bridge	E. R.		Fifeshire, East
Farquharson, Dr.	L	Aberdeenshire, West	*Kinnear, J. B.	L	Northamptonshire, S.
*Ferguson, J. E. J.	L	Leicestershire, Mid,	*Knightley, Sir R.	C	Dundee
		Loughborough	*Lacaita, C. C.	P	Queen's County, Lein
Finch-Hatton, M.	C	Lincolnshire, Holland	Lalor, R.	L	Cheshire, Crewt
		or Spalding	*Latham, G. W.	C	Lincolnsh., Stamford
*Fisher, W. H.	C	Fulham	Lawrence, J. C.	C	Surrey, Reigate
*Fitzgerald, R. U.	C	Cambridge	Lawrence, Sir T.	C	Liverp'l, Abercromby
*Fletcher, B.	L	Wilts, Chippingham	*Lawrence, W. F.	C	St. Pancras, West
Fletcher, Sir H.	C	Sussex, Mid or Lewes	*Lawson, H. W.	P	Kildare, South
Folkestone, Lord	C	Middlesex, Enfield	Leahy, J.	L	Lanc., S.E., Radcliffe
Forster, Sir C.	L	Walsall	Leake, R.		cum-Farnworth
Fowler, Sir R. N.	C	City of London			Cork, North-east
Fry, T.	L	Darlington	Leamy, E.	P	Worcestershire, W.
*Gent-Davis, R.	C	Lambeth, Kennington	Lechmere, Sir E.	C	West Ham, South
*Gibson, J. G.	C	Liverpool, Walton	*Leicester, J.	C	Kensington, North
Giles, A.	C	Southampton	*Lethbridge, Sir R.	C	Somersetshire, North
Gladstone, H.	L	Leeds, West	*Llewelyn, E. H.	C	York
*Goldsworthy, Gen.	C	Hammersmith	*Lockwood, F.	L	Wiltshire, Devizes
Gorst, Sir J. E.	C	Chatham	Long, W. H.	C	Westm'land., Appleby
Gourley, E. T.	L	Sunderland	Lowther, Hon. W.	C	Devonsh., S. Molton
Grantham, W.	C	Croydon	Lymington, Lord	L	Leicester
Gray, E. D.	P	Dublin City, St.	McArthur, A.	L	Newry
		Stephen's Green	McCarthy, J. H.	P	Glasgow, St. Rolox
*Greenall, Sir G.	C	Warrington	*McCulloch, J.	L	Linlithgowshire
Greene, E.	C	Wakefield	*McLagan, P.	L	Stafford
Grey, A. H. G.	L	Northumb., Tyneside	*McLaren, C. B. B.	L	Bedfordshire, North
*Grimston, Lord	C	Herts, St. Albans	Magniac, C.	C	Leicestershire, East
*Haldane, R. B.	L	Haddingtonshire	Manners, Lord J.	C	Brighton
*Hallett, H.	C	Rochester	*Marriott, W. T.	C	Lanarkshire, Mid
Halsey, T. F.	C	Herts, Watford	*Mason, S.	L	Salford, South
*Hamilton, Col. C.	C	Rotherhithe	*Mather, W.	L	Yorks, N.R., Richm.
Hardy, J. S. G.	C	Kent, Medway	Milbank, Sir F. A.	L	King's County, Birm
*Harker, W.	L	Yorks, W.R. (East),	Molloy, B. C.	P	Whitechapel
		Ripon	*Montagu, S.	L	Monmouthshire S.
*Harrison, Sir G.	L	Edinburgh, South	Morgan, Col. F. C.	C	Battersea
Hastings, G. W.	L	Worcestershire, East	*Morgan, O. V.	L	Nottingham, East
Havelock-Allan,			Morley, A.	L	Newcastle-on-Tyne
Gen. Sir H.	L	Durham, South-east	*Morley, J.	L	Clapham
Heneage, E.	L	Grimsby	*Moulton, J. F.	L	Cumb., Egremont
Hervey, Lord F.	C	Bury St. Edmunds	*Muncaster, Lord	C	Sheffield, Brightside
Hibbert, J. T.	L	Oldham	Mundella, A. J.	L	Warwickshire, North
*Hickman, A.	C	Wolverhampton	Muntz, P. A.	C	Notts, Newark
Hill, Lord A.	C	Down, West	*Newark, Lord.	C	

MEMBER.	POLITICS.	CONSTITUENCY.	MEMBER.	POLITICS.	CONSTITUENCY.
*Newnes, G. . . .	L	Cambridgeshire, East	*Sidebottom, Capt. W. . . .	C	Derbysh., High Peak
Noel, E. . . .	P	Dumfries Boroughs	Simon, Serjeant . . .	L	Dewsbury
Nolan, J. P. . . .	P	Galway, North	*Sitwell, Sir G. . . .	C	Scarborough
*Norris, E. S. . . .	C	Limehouse	Spencer, Hon. C. . . .	L	Northamptonsh., Mid
Northcote, Hon.H.	C	Exeter	*Spensley, H. . . .	L	Finsbury, Central
O'Connor, A. . . .	P	Donegal, East	*Stansfeld, Rt.Hon. J. . . .	L	Halifax
O'Connor, T. P. . .	P	Liverpool, Scotland, Galway City	Stewart, M. J. . . .	C	Kirkcudbrightshire
Orr-Ewing, Sir A. .	C	Dumbartonshire	Storey, S. . . .	L	Sunderland
*Otter, F. . . .	C	Lincolnshire, Louth	*Strong, R. . . .	L	Camberwell, North
Palmer, C. M. . . .	L	Durham, Jarrow	Stuart, J. . . .	L	Shoreditch, Hoxton
Parnell, C. S. . . .	P	Cork City	*Sullivan, McD. . . .	P	Westmeath, South
*Peacock, R. . . .	L	Lancashire, Gorton	*Swinburne, Sir J. .	L	Stafford, Lichfield
*Pease, H. F. . . .	L	Yorks,N.R.,Cleveland	Talbot, C. R. M. . .	L	Glamorganshire, Mid
Peel, Sir R. . . .	C	Blackburn	*Temple, Sir R. . . .	C	Worcester., Evesham
*Pelly, Sir L. . . .	C	Hackney, North	*Thompson, Sir H. .	L	Linc., North Lindsay or Brigg
*Pickersgill, E. H. .	L	Bethnal Green, S.W.	*Tipping, W. . . .	C	Stockport
*Pilkington, Dr. G. .	L	Lancashire, Southport	Tollemache, H. J. . .	C	Cheshire, Eddisbury
Playfair, Sir L. . .	L	Leeds, South	Tottenham, A. L. . .	C	Winchester
*Pomfret, W. P. . .	C	Kent, Ashford	Trevelyan, G. O. . .	C	Hawick
Potter, T. B. . . .	L	Rochdale	*Trotter, H. J. . . .	C	Colchester
Powell, W. R. H. . .	L	Carmarthenshire, W.	Tyler, Sir H. W. . .	C	Great Yarmouth
Power, R. . . .	P	Waterford City	*Valentine, C. J. . .	C	Cumb., Cockermouth
Price, Capt. G. E. .	C	Devonport	Villers, C. P. . . .	L	Wolverhampton
Puleston, J. H. . .	C	Devonport	*Vincent, H. . . .	C	Sheffield, Central
Ramsay, J. . . .	L	Falkirk District	Walrond, W. H. . .	C	Devonshire, Tiverton
Redmond, W. . . .	P	Fermanagh, North	Watkin, Sir E. . . .	Ind.	Hythe
Reed, Sir E. J. . .	L	Cardiff	Wayman, T. . . .	L	Yorks, W.R. (North),
*Reid, H. G. . . .	L	Aston Manor	West, H. W. . . .	L	Ipswich [Elland
Rendel, S. . . .	L	Montgomeryshire	*Westlake, J. . . .	L	Essex, Romford
Richard, H. . . .	L	Merthyr Tydvil	*Weston, J. D. . . .	L	Bristol, South
Richardson, T. . .	L	Hartlepool	*White, J. B. . . .	C	Gravesend
*Roberts, J. . . .	L	Flint Boroughs	Wiggin, H. . . .	L	Staffs., Handsworth
*Robertson, H. . .	L	Merionethshire	*Williams, A. J. . .	L	Glamorganshire, S.
Robinson, T. . . .	L	Gloucester	*Williams, J. C. . .	L	Nottingham, South
Robson, W. S. . . .	L	Bow and Bromley	Williamson, S. . . .	L	St. Andrew's Burghs
Roe, T. . . .	L	Derby	*Wilson, H. J. . . .	L	Yorks, W.R. (South),
Rogers, J. E. T. . .	L	Bermondsey	Wilson, I. . . .	L	Holmfirth
Roscoe, Sir H. . .	L	Manchester, South	*Wilson, J. . . .	L	Middlesbrough
*Ross, A. H. . . .	C	Maidstone	*Wilson, J. . . .	L	Durham, Houghton-
*Round, J. . . .	C	Essex, North-east	Wilson, J. . . .	L	le-Spring
Ruston, J. . . .	L	Lincoln	Wilson, Sir M. . . .	L	Edinburgh, Central
Rylands, P. . . .	L	Burnley	Woodall, W. . . .	L	Yorks, W.R. (North),
*Samuelson, Sir B. .	L	Oxfordshire, Banbury	*Woodhead, J. . . .	L	Hanley [Skipton
Saunders, W. . . .	L	Hull, East	Worms, Baron H. . .	L	Yorks, W.R. (East),
Sclater-Booth, G. .	C	Hants, Basingstoke	de . . .	C	Spen Valley
*Seale-Hayne, C. . .	L	Devon, Ashburton	Wortley, C. B. S. .	C	Liverpool, E. Toxteth
Selwin-Ibbetson, Sir H. . . .	C	Essex, Epping	*Wright, C. . . .	L	Sheffield, Hallam
Shaw, T. . . .	L	Halifax	York, Capt. J. R. . .	C	Lanc., S.W., Leigh
Sheridan, H. B. . .	L	Dudley [Doncaster			Glo'ster, Tewkesbury
*Shirley, W. H. . .	L	Yorks, W.R. (South),			

Canadian Budget for 1887,

Presented by the Minister of Finance (April 1st, 1886) estimates the

Revenue	£6,900,000
Expenditure	£6,624,900

Surplus £275,100

The Revenue for the current year, to March 20th, 1866, being

Expenditure	£4,806,012
	£4,691,109

Surplus £114,903

(This includes £500,588 on account of the North-West rebellion.)

Emigration in the United States, 1885.

Germany	106,910
Ireland	49,356
England	45,385
Scotland	10,163
Sweden and Norway	31,591
Russia (including Finland and Poland)	20,151
Austria	10,602
Bohemia and Hungary	14,752
Italy	15,689

Total 326,411

Total in 1884, 403,230.

Civil List Pensions Grants 1880—1885:—

1880.

PER ANN.

Armstrong, Laura	£80
Vargas, Mrs., and five daughters	150
Turner, Mary A. S.	75
MacLeay, Millicent F. L.	100
Dixon, Marian H.	100
Fitch, Walter H.	100
Best, W. T.	100
Dunbar, Dr. Henry	80
Jackson, Georgina	40
Goss, Lady, and two daughters	130
Broun, Mrs.	75
Hawker, Pauline M.	80
Stratford de Redcliffe, Viscountess, and three unmarried daughters	500
Clifford, Sophia L. J.	80
Keats de Llanos, Fanny	80

1881.

Rodgers, Maria	75
Wallace, Alfred R.	200
Schmitz, Dr. Leonard	50
Greenhill, Dr. W. A.	50
Wells, Dr. Charles	50
O'Connor, Charles Patrick	150
Jones, Professor T. W.	50
Jones, Rev. John	50
Lucy, Anne	70

1882.

Burton, Katherine	80
Burke, Marianna A. A.	400
Cole, Lady	150
Waugh, Edwin	90
Callaghan, Alice	50
Gardiner, Samuel R.	150
Robinson, Emma	80
Hullah, John	150
Wingate, David	50

1883.

Haas, Alma	80
Palmer, Auguste M. E.	200
Bonaparte, Prince Lucien	250
Palliser, Lady	150
Scott-Russell, Harriette	90
Edwards, Edward	80
Arnold, Matthew	250
Southey, Rev. Charles C.	100

1884.

Moncrieff, Mrs. Marie A.	100
Furnivall, Fred. James	155
Murray, James A. H., LL.D.	270
Hancock, W. Neilson, Q.C., LL.D.	100
Balfe, Madame	80
Houghton, Rev. W.	100

PER ANN.

Lubbock Brown, Miss Emma	70
Charlotte and Caroline Raeburn, Misses, each	40
Griffiths, Mrs. (widow of inventor of screw propeller)	100
Docker, Edward Scott	100

1885.

Stewart, Mrs. and Misses, two in all (mother and sisters of one of the defenders of Khartoum)	400
Power, Misses, four (sisters of another of the defenders of Khartoum), each	50
Jewitt, Llewellyn	70
Hillocks, Rev. J. T.	75

PAYMENTS FOR CIVIL LIST PENSIONS DURING PRESENT REIGN.

1838—1848	£49,842
1848—1858	133,774
1858—1868	200,661
1868—1878	215,009
1878—1885	161,120
47 Years	£760,426

List of the Living Members of the Old and New Testament Revision Companies in England.

OLD TESTAMENT.

The Right Rev. Edward Harold Lord Bishop of Winchester, Farnham Castle, Surrey.
The Venerable the Archdeacon of Maidstone, Canterbury.
R. L. Beasley, Esq., Gonville and Caius Coll., Cambridge.
Frank Chance, Esq., M.D., Burleigh House, Sydenham Hill, S.E.
The Rev. T. R. Cheyne, Tendring Rectory, Colchester.
The Very Rev. Principal Douglas, 18, Royal Crescent, Glasgow.
The Rev. Dr. Ginsburg, Holmlea, Virginia Water Station, Chertsey.
The Rev. Dr. Kay, Gt. Leghs Rectory, Chelmsford.
The Rev. Professor Lumby, St. Catherine's Coll., Cambridge.
The Rev. A. H. Sayce, Queen's Coll., Oxford.
Professor Wright, St. Andrew's Station Road, Cambridge.
The Rt. Rev. The Lord Bishop of Bath and Wells, Palace, Wells, Somerset.
The Very Rev. the Dean of Canterbury, Deanery, Canterbury.
The Rev. Professor Birrell, St. Mary's Coll., St. Andrews, N.B.
The Rev. Professor Davidson, New Coll., Edinburgh.
S. R. Driver, Esq., New Coll., Oxford.
The Rev. J. D. Geden, Wesleyan Coll., Disbury, Manchester.
The Rev. Dr. Gotch, Baptist Coll., Bristol.
The Rev. Professor Leathes, Cliffe Rectory, Rochester.
The Very Rev. the Dean of Peterborough, Deanery, Peterborough.

The Rev. W. Robertson-Smith, Christ's Coll., Cambridge.
W. Aldis-Wright, Esq., Trin. Coll., Cambridge.

NEW TESTAMENT.

The Rt. Rev. Charles Wordsworth, Bishop of St. Andrew's, Bishopshall, St. Andrew's, N.B.
The Very Rev. Principal Brown, Free Church Coll., Aberdeen.
The Rev. Dr. Moulton, The Leys, Cambridge.
The Venerable the Archdeacon of Oxford.
The Rev. Prebendary Scrivener, Hendon Vicarage, N.W.
The Very Rev. Charles John Vaughan, D.D., Dean of Llandaff, The Temple, E.C.
The Rev. Canon Troutbeck, 4, Dean's Yard, Westminster.
The Rev. Dr. G. Vance Smith, 5, Parade, Carmarthen.
The Rt. Rev. The Lord Bishop of Gloucester and Bristol, Palace, Gloucester.
The Very Rev. The Dean of Rochester, Deanery, Rochester.
The Very Rev. The Dean of Lichfield, Deanery, Lichfield.
The Rt. Rev. The Lord Bishop of Durham, Auckland Castle, Bishop Auckland.
The Rev. Dr. Angus, Baptist Coll., Regent's Park, London.
The Rev. Professor Hort, 6, St. Peter's Terrace, Cambridge.
The Rev. Canon Kennedy, The Elms, Cambridge.
The Rev. Professor Willigan, University, Aberdeen.
The Rev. Principal Newth, New Coll., Hampstead, N.W.
The Rev. Professor Roberts, St. Andrew's, N.B.
The Rev. Canon Westcott, Trin. Coll., Cambridge.

Reformatory Schools, for children (a) who have been convicted of crime and undergone imprisonment; (b) who have committed some petty crime, or are likely to fall into crime; (c) whose offence consists, under the Education Act of 1876, in non-attendance at school (called "educational cases"). See also INDUSTRIAL SCHOOL. There are 61 now under inspection. The cost of maintenance over the past ten years has been as below.

Year.	No. in School.	Paid by Treasury.	Parent.	Rates.	Subscriptions and Legacies.	Total Expenditure.
		£	£	£	£	£
75	5,615	87,382	6,378	21,241	6,897	137,191
76	5,634	86,581	6,741	20,618	9,954	137,660
77	5,935	87,305	6,897	20,823	7,824	139,825
78	5,963	91,571	6,992	24,504	7,820	139,327
79	5,975	91,429	6,316	23,357	5,000	136,183
80	5,927	91,780	5,972	23,911	6,005	134,079
81	6,738	90,787	5,805	22,953	4,817	129,610
32	6,601	87,241	5,918	23,710	5,956	134,204
33	6,657	85,635	6,140	23,183	4,943	126,122
34	6,360	85,528	6,168	24,917	4,146	125,583

Cost per head of each school for the year 14 (latest return):—

REFORMATORY SCHOOL.	Average No. of Inmates.	Cost of Maintenance and Management.			Net Cost per Head.		
		£	s.	d.	£	s.	d.
ENGLAND—BOYS.							
Devon and Exeter	30	690	7	0	21	8	4
Monmouthshire	34	612	4	7	12	11	2
Woodbury Hill	54	1,035	9	1	21	19	2
Northamptonshire	40	995	14	10	24	15	0
Herts	44	917	16	9	18	12	9
Buxton	51	1,034	3	3	18	6	11
Home-in-the-East	48	830	7	9	16	0	4
Bedfordshire	52	1,077	0	11	19	10	6
Bradwall	62	1,204	14	7	21	0	4
Glamorganshire	50	1,001	19	2	18	4	10
Wilts	59	1,143	13	0	20	16	8
Manchester & Salf'd	75	1,916	0	7	21	15	7
Hardwicke	85	1,473	3	5	21	1	1
Castle Howard	80	1,540	8	8	21	9	11
Stoke Farm	81	1,322	9	5	17	4	3
Warwickshire	78	1,594	9	3	15	4	6
Suffolk	76	1,051	11	7	13	4	7
Saltley	100	1,657	12	5	17	14	8
Hants	82	1,985	14	10	24	6	10
Calder Farm	110	2,058	14	3	20	4	0
North Lancashire	128	2,528	16	5	20	18	9
Liverpool Farm	136	2,662	15	5	19	12	3
Leeds	150	2,815	12	11	20	3	9
Kingswood	146	3,076	5	1	22	1	2
Boleyn Castle, R.C.	182	3,241	3	6	17	14	0
Wandsworth	173	3,855	9	5	20	15	3
"Akbar"	150	3,360	1	3	21	16	10
"Clarence," R.C.	194	4,019	5	5	22	10	6
"Cornwall"	248	5,603	3	10	23	0	4
Birkdale Farm, R.C.	202	3,370	2	7	17	11	3
North-Eastern	176	3,247	10	11	21	13	2
Market Weighton, Rom. C.	217	3,980	18	11	17	8	0
Red Hill	285	6,667	15	5	23	4	0
ENGLAND—GIRLS.							
Northamptonshire	16	427	6	5	22	5	10
Ipswich	28	651	18	3	22	8	1
Lancashire, Rom.C.	71	1,618	14	0	23	9	1
Sunderland	43	976	3	5	16	15	5
Surrey, Girls	45	1,157	13	6	20	14	1
Warwickshire	26	680	8	5	23	13	11
Red Lodge	50	1,172	18	5	22	13	6
Limpey Stoke	53	1,260	16	6	21	2	1
Doncaster	59	1,281	14	3	20	19	9
Toxteth Park	62	1,245	16	7	17	18	9
Devon and Exeter	41	869	8	11	18	14	9
Liverpool	79	1,930	18	4	20	8	10
Yorkshire, Rom. C.	83	1,587	7	10	14	10	3
Arno's Court, R. C.	80	1,199	15	10	16	4	10
Hampstead	124	2,946	15	3	19	12	8
SCOTLAND—BOYS.							
Rossie	70	1,208	19	6	17	10	3
Inverness	40	818	0	5	22	9	7
Kibble	90	1,659	15	7	17	1	6
Stranraer	95	1,864	6	6	16	14	7
Wellington Farm	103	1,825	8	3	16	14	9
Old Mill	96	2,402	17	8	24	8	6
Glasgow	87	2,294	9	11	34	19	11
Parkhead, Rom. C.	198	3,379	16	7	17	7	2
SCOTLAND—GIRLS.							
Aberdeen	24	537	4	4	17	12	2
Glasgow	27	734	5	3	26	12	1
Dalry	38	792	6	1	19	5	1
Dalbeth	67	1,134	11	2	15	5	7

The number of Young Offenders admitted into and discharged from Reformatory Schools in Great Britain was (latest return) :—

ADMISSIONS.	ENGLAND.				SCOTLAND.				TOTAL.	
	PROTESTANT.		ROM. CATH.		PROTESTANT.		ROM. CATH.		Boys. Girls.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.		
1854—79	18,767	5,792	4,079	1,237	4,352	1,461	959	489	29,963	7,173
1880	848	185	248	58	217	30	67	32	1,380	305
1881	784	172	248	61	149	27	51	16	1,232	267
1882	935	187	272	55	170	16	61	9	1,438	267
1883	878	202	234	54	157	21	68	14	1,337	291
1884	844	221	139	57	154	70	22	18	1,289	236
TOTAL	23,056	6,759	5,220	1,522	5,199	1,625	1,228	578	36,639	8,548
DISCHARGES.										
To employment or service	5,854	1,142	2,496	703	2,445	1,006	564	273	10,447	4,036
To friends	6,277	2,492	1,364	331	1,126	181	308	194	10,076	2,197
Emigrated	1,925	291	55	58	209	10	36	13	2,435	162
Sent to sea	3,142	—	1,223	—	142	—	—	—	4,507	—
Enlisted	477	—	198	—	59	—	—	—	734	—
Discharged on account of disease	257	89	133	29	44	19	24	2	403	181
Discharged as incorrigible	170	37	66	7	18	6	15	4	229	91
Transferred	500	77	174	61	127	12	45	4	716	284
Died	404	180	139	103	170	55	41	24	809	399
Absconded	555	132	112	11	208	74	107	2	969	232
TOTAL	19,555	4,440	5,960	1,303	4,546	1,363	1,140	516	31,325	7,498
Under Detention, Dec. 31, 1884										
In school	2,884	800	584	197	569	200	77	59	4,453	917
On licence	573	91	92	20	71	60	8	3	795	123
In prison	6	2	—	1	1	—	—	—	7	3
Absconded, sentence unexpired	37	5	4	—	11	2	3	—	55	1
Retained in School, sentence expired	1	—	1	1	1	—	—	—	2	1

Education, Elementary, Statistics of, in Great Britain and Ireland (latest return).
GREAT BRITAIN.

Years.	No. of Schools Inspected.	School Accommodation.	Average Attendance.	Attendance at Inspection.	Government Grant.
1851	2,310	374,303	271,126	256,888	£164,312
1860	7,272	1,320,248	884,234	962,932	724,403
1870	10,949	2,215,235	1,453,531	1,780,528	840,336
1880	20,670	4,842,807	3,155,534	3,738,728	2,854,067
1881	21,136	5,002,116	3,273,501	3,848,011	2,978,224
1882	21,362	5,157,406	3,436,416	4,033,114	3,101,028
1883	21,630	5,304,144	3,560,351	4,203,902	3,247,725
1884	21,892	5,482,410	3,721,366	4,443,889	3,403,674

IRELAND.

Years.	No. of Schools Inspected.	School Accommodation.	Average Attendance.	Grants and Rates.
1865	6,372	922,084	321,209	£341,436
1880	7,590	1,083,020	468,557	690,231
1881	7,648	1,066,259	453,567	707,458
1882	7,705	1,083,298	469,192	709,661
1883	7,752	1,081,136	467,704	718,908
1884	7,832	1,089,079	492,928	734,761

Industrial Schools (England and Wales) for vagrant, destitute, or workhouse but criminal children (see also REFORMATORY SCHOOLS, and SCHOOL BOARD FOR LONDON). There are 136 now under inspection, of which 9 are Truant Schools and 13 Day Industrial Schools. The cost of maintenance over the past 10 years have been as below :—

Year.	No. in Schls.	Paid by Treasury.		Parents.		Rates.		School Boards.		Subscriptions.		Total Expenditure.	
		£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
1875	11,776	136,698	10 3	11,666	13 11	19,118	1 4	22,597	0 0	57,445	11 9	274,156	8 2
1876	12,555	138,310	12 7	13,797	0 7	20,870	8 3	30,966	2 9	50,556	12 9	292,170	2 7
1877	13,494	144,369	8 8	16,133	10 1	24,318	4 6	40,213	7 9	44,412	14 0	292,280	10 5
1878	14,106	153,469	5 0	17,116	9 3	26,961	13 5	95,674	5 5	38,326	12 7	362,314	17 8
1879	14,847	159,650	6 7	16,751	15 11	22,112	1 3	57,069	1 2	34,886	1 1	303,655	18 0
1880	15,136	167,639	1 11	16,999	13 3	25,187	18 11	57,881	7 2	29,260	9 5	316,175	0 6
1881	16,955	170,107	11 1	16,855	0 6	48,780	15 10	56,809	19 4	34,727	18 9	342,658	17 1
1882	17,614	170,472	19 6	16,993	7 9	42,726	10 6	59,583	16 5	30,918	10 1	338,200	8 0
1883	18,708	176,733	16 3	17,596	11 0	40,052	11 10	65,542	13 7	42,120	19 8	359,821	17 8
1884	19,483	183,458	13 0	17,955	4 6	39,466	5 1	78,193	13 10	30,152	13 8	362,614	8 5

School Board for London.

FINANCIAL STATEMENT.

Statement of Receipts and Expenditure by the School Board for London for the Year ended on the 25th March, 1885.

RECEIPTS.

	£	s.	d.	£	s.	d.
To Balance on 25th March, 1884	...	...	...	193,294	6	5
" Grants from the Committee of Council on Education	241,015	6	2			
" School Fees paid by Education Department	40	3	5			
" Science and Art Department	6,153	6	0			
				247,208	15	7
" Contribution from Her Majesty's Treasury, in aid of Industrial Schools	...	...	...	4,340	0	8
" Endowment	...	...	...	141	1	1
" Payments made to the Treasurer by Rating Authorities:—						
On account of Precepts for the Aggregate Amount of £950,804 ss.	939,157	1	0			
" Government Property not included in Valuation List (Being equal to a rate at 7 ⁸ / ₉ d. in the pound)	5,112	18	6			
				944,269	19	6
" School Fees	...	...	...	108,920	6	1
" Loans raised, viz.:—						
Loan LV.	...	...	...
" LVII.	...	...	...
" LVIII.	...	...	...
				750,000	0	0
" Income arising from other sources:—						
Scholarships and Prizes	1,608	19	11			
Rents of Sundry Property, less amount paid for rent and repairs	1,304	16	10			
Insurance Fund	154	11	10			
Interest on Money deposited	38	7	1			
				3,106	15	8
				£2,251,290	5	0

N.B.—The Board have raised by Loans the sum of £6,391,000.

EXPENDITURE.

	£	s.	d.
Expenses of Administration	63,865	15	1
Expenses of Maintenance of Public Elementary Schools	1,003,797	7	5
Contributions towards, or Expenses of Industrial Schools	41,150	5	10
Capital Charges	684,315	16	3
Loans	279,813	3	10
Expenses not included under the foregoing heads	24,228	3	9

To Balance in hand 25th March, 1885

2,097,170 12 2
154,119 12 10

£2,251,290 5 0

NAMES OF MEMBERS OF LONDON SCHOOL BOARD.

- City of London*.—Henry Spicer, Esq., M.P., Miss Davenport-Hill, Mr. Alderman Savory, Sir Richard Temple, Bart., M.P., *Vice Chairman*.
- Chelsea*.—George White, Esq., B.A., LL.B., Rev. Prebendary Eyton, M.A., William Bousfield, Esq., Professor Gladstone, F.R.S., Mrs. Webster.
- Finsbury*.—Mark Wilks, Esq., W. Roston Bourke, Esq., Benjamin Lucraft, Esq., Rev. W. Panckridge, M.A., James Wilson Sharp, Esq., Thos. Fras. Stonelake, Esq.
- Greenwich*.—Lieut.-Colonel Hughes, M.P., William Phillips, Esq., Henry Gover, Esq., Rev. Richard Rhodes Bristow, M.A.
- Hackney*.—John Lobb, Esq., F.R.G.S., Charles Deacon, Esq., James Hart, Esq., Rev. Charles George Gull, M.A., Benjamin S. Olding, Esq.
- East Lambeth*.—Rev. Andrew A. W. Drew, M.A., Rev. Charles E. Brooke, M.A., Thomas E. Heller, Esq., G. Crispe Whiteley, Esq.
- West Lambeth*.—Henry Lynn, Esq., Harry Seymour Foster, Esq., F.C.A., Rev. Arthur W. Jephson, M.A., Rev. George M. Murphy, Frederick William Lucas, Esq., James Thomas Helby, Esq.
- Marylebone*.—Edmund Barnes, Esq., J. Russell Endean, Esq., Rev. John J. Coxhead, M.A., General Moberley, Rev. Joseph R. Diggle, M.A., *Chairman*, Rev. Canon Barker, M.A., Mrs. Westlake.
- Southwark*.—Sir John Bennett, Edric Bayley, Esq., Rev. Charles D. Lawrence, M.A., Rev. William Lees Bell, M.A.
- Tower Hamlets*.—Edward North Buxton, Esq., M.P., Rev. W. Parkinson Jay, M.A., Colonel Lenox Prendergast, Rev. John Fletcher Porter, Frederick J. W. Dellow, Esq.
- Westminster*.—H. N. Bowman Spink, Esq., Rev. William Sinclair, James Ross, Esq., Captain Clifford Probyn, James S. Burroughes, Esq.
- Rev. Joseph R. Diggle, M.A., *Chairman of the Board*.
Sir Richard Temple, Bart., M.P., *Vice-Chairman*.

Chairmen elected by the undermentioned Standing Committees, as follow :—

Rev. Joseph Diggle, M.A.	...	...	<i>School Management Committee.</i>
John Lobb, Esq., F.R.G.S.	...	...	<i>Store Committee.</i>
Wm. Bousfield, Esq.	...	...	<i>Works Committee.</i>
T. E. Heller, Esq.	...	...	<i>Evening Classes Committee.</i>
Rev. Charles Lawrence, M.A.	...	...	<i>Educational Endowments Committee.</i>
Sir Richard Temple, Bart., M.P.	...	...	<i>Finance Committee.</i>
Hy. Spicer, Esq., M.P.	...	...	<i>Industrial Schools Committee.</i>
Lieut.-Col. Hughes, M.P.	...	...	<i>Statistical Committee.</i>
Rev. John J. Coxhead, M.A.	...	...	<i>Bye-Laws Committee.</i>

Area and Population of the United Kingdom and of the Islands in the British Seas in 1881.

	Area of Land in Acres.	Enumerated Population in 1881.		
		Persons.	Males.	Females.
England and Wales	36,772,723	25,974,439	12,639,902	13,334,537
Scotland	19,084,659	3,735,573	1,799,475	1,936,098
Ireland	20,194,602	5,174,836	2,533,277	2,641,559
United Kingdom...	76,051,984	34,884,848	16,972,654	17,912,194
Isle of Man	140,985	53,558	25,760	27,798
Channel Islands ...	48,322	87,702	40,321	47,381
Army and Navy, and Merchant Seamen abroad being...		215,374	215,374	—
United Kingdom, etc.	76,241,291	35,241,482	17,254,109	17,987,373

Agricultural Returns for 1878—1885, taken from the Official Report.

CROPS.

	1879.	1880.	1881.	1882.	1883.	1884.	1885.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat . . { Engl. 2,718,992	2,718,992	2,745,733	2,641,045	2,829,491	2,466,596	2,530,711	2,349,305
Wales 94,639	94,639	89,729	90,026	95,387	78,394	77,611	73,858
Scotl. 76,613	76,613	73,976	74,738	79,082	68,172	66,716	55,155
Gt. Brit. . .	2,890,244	2,909,438	2,805,809	3,003,960	2,613,162	2,677,038	2,478,318
Barley or { Engl. 2,236,101	2,236,101	2,060,807	2,029,499	1,857,542	1,912,162	1,808,408	1,894,350
Bere . . { Wales 152,491	152,491	142,514	142,318	135,493	134,281	129,858	125,524
Scotl. 278,584	278,584	264,120	270,517	262,234	245,548	230,554	237,472
Gt. Brit. . .	2,667,176	2,467,441	2,442,334	2,255,269	2,291,991	2,168,820	2,257,346
Oats . . . { Engl. 1,425,126	1,425,126	1,520,125	1,627,004	1,533,452	1,674,910	1,620,264	1,647,549
Wales 226,967	226,967	239,526	243,544	251,033	254,522	249,204	246,656
Scotl. 1,004,535	1,004,535	1,037,254	1,030,727	1,049,380	1,045,949	1,045,895	1,046,285
Gt. Brit. . .	2,656,628	2,796,905	2,901,275	2,833,865	2,975,381	2,915,363	2,940,490
Potatoes . { Engl. 323,992	323,992	324,931	347,733	332,243	334,967	360,025	359,026
Wales 42,609	42,609	38,940	42,440	41,074	39,694	41,176	40,711
Scotl. 174,743	174,743	187,061	189,161	167,147	168,794	163,847	148,994
Gt. Brit. . .	541,344	550,932	579,334	541,064	543,455	565,048	548,731
Turnips and { Engl. 1,457,762	1,457,762	1,473,030	1,478,682	1,462,824	1,468,741	1,472,124	1,461,425
Swedes . { Wales 67,349	67,349	65,190	66,356	67,695	69,878	70,488	69,320
Scotl. 491,964	491,964	485,987	490,604	493,807	490,307	484,998	484,213
Gt. Brit. . .	2,017,075	2,024,207	2,035,642	2,024,326	2,028,926	2,027,610	2,014,958
Clover and { Engl. 2,674,949	2,674,949	2,646,241	2,548,952	2,546,272	2,584,794	2,544,805	2,750,205
Rotation { Wales 347,473	347,473	332,353	331,401	314,204	309,124	310,157	332,223
Grasses . { Scotl. 1,450,951	1,450,951	1,455,745	1,461,932	1,466,916	1,502,004	1,526,442	1,571,745
Gt. Brit. . .	4,473,373	4,434,339	4,342,285	4,327,392	4,395,922	4,381,404	4,654,173
Permanent { Engl. 11,233,526	11,233,526	11,461,856	11,655,825	11,800,728	12,008,679	12,197,566	12,229,815
Pasture . { Wales 1,773,811	1,773,811	1,805,750	1,815,413	1,837,057	1,865,406	1,886,235	1,892,663
Scotl. 1,159,387	1,159,387	1,159,353	1,172,159	1,183,890	1,191,288	1,207,019	1,220,000
Gt. Brit. . .	14,166,724	14,426,959	14,643,397	14,821,675	15,065,373	15,290,820	15,342,478

LIVE STOCK.

	1879.	1880.	1881.	1882.	1883.	1884.	1885.
	No.	No.	No.	No.	No.	No.	No.
Cattle . . { Engl. 4,128,940	4,128,940	4,158,046	4,160,085	4,081,735	4,216,625	4,451,658	4,713,101
Wales 643,815	643,815	654,714	655,345	644,510	651,837	680,879	708,859
Scotl. 1,083,601	1,083,601	1,099,286	1,096,212	1,081,246	1,094,317	1,136,604	1,176,004
Gt. Brit. . .	5,856,356	5,912,046	5,911,642	5,807,491	5,962,779	6,269,141	6,597,964
Sheep . . { Engl. 18,445,522	18,445,522	16,828,646	15,382,856	14,947,994	15,594,660	16,428,064	16,809,778
Wales 2,873,460	2,873,460	2,718,316	2,466,945	2,517,914	2,581,250	2,656,997	2,767,659
Scotl. 6,838,098	6,838,098	7,072,088	6,731,252	6,853,860	6,892,361	6,983,293	6,957,198
Gt. Brit. . .	28,157,080	26,619,059	24,581,053	24,319,768	25,068,271	26,068,354	26,534,635
Pigs* . . . { Engl. 1,771,081	1,771,081	1,607,914	1,733,280	2,122,625	2,231,195	2,207,444	2,036,665
Wales 192,757	192,757	182,003	191,792	233,694	229,964	217,387	215,731
Scotl. 127,721	127,721	120,925	123,018	154,083	156,598	159,560	150,984
Gt. Brit. . .	2,091,559	2,000,842	2,048,090	2,510,402	2,617,757	2,584,391	2,403,380

* Not including Town Pigs and those with less than $\frac{1}{4}$ acre attached.

Hops, Statistics of, for the year 1885.

COUNTIES, etc.	ESTIMATED		ESTIMATED AVERAGE YIELD PER ACRE.			
	TOTAL PRODUCE in 1885.	ACREAGE in 1885.	1885.	Esti- mated Ordinary Average.	1885 compared with the Estimated Ordinary Average.	
					Above.	Below.
TOTAL FOR GREAT BRITAIN . .	Cwt. 509,170	Acres. 71,327	Cwt. 7'14	Cwt. 7'84	Cwt.	Cwt. 0'70
ENGLAND	509,170	71,327	7'14	7'84	.....	0'70
WALES. (<i>No Hops grown</i>) . . . .	.....	.....	.....	.....	.....	.....
SCOTLAND. (<i>Ditto</i>) . . . . .	.....	.....	.....	.....	.....	.....
ENGLAND.						
Div. No. 1.	Bedford . . . . .	.....	.....	.....	.....	.....
	Cambridge . . . . .	.....	.....	.....	.....	.....
	Essex	8	2	4'00	6'00	2'00
	Hertford	9	3	3'00	6'00	3'00
	Huntingdon . . . . .	.....	.....	.....	.....	.....
	Lincoln . . . . .	.....	.....	.....	.....	.....
	Norfolk . . . . .	.....	.....	.....	.....	.....
Div. No. 2.	Suffolk	350	56	6'25	6'50	0'25
	York, E. Riding . . . . .	.....	.....	.....	.....	.....
	Berks	* 67	10	—	—	—
	Bucks . . . . .	.....	.....	.....	.....	.....
	Hants	22,485	3,303	6'81	6'95	0'14
	Kent	337,646	44,834	7'53	8'50	0'97
	Leicester . . . . .	.....	.....	.....	.....	.....
Div. No. 3.	Middlesex . . . . .	.....	.....	.....	.....	.....
	Northampton . . . . .	.....	.....	.....	.....	.....
	Notts	58	30	1'93	4'27	2'34
	Oxford . . . . .	.....	.....	.....	.....	.....
	Rutland . . . . .	.....	.....	.....	.....	.....
	Surrey	17,373	2,627	6'61	8'04	1'43
	Sussex	93,565	10,722	8'73	8'18	0'55
Div. No. 4.	Warwick . . . . .	.....	.....	.....	.....	.....
	Cornwall . . . . .	.....	.....	.....	.....	.....
	Devon . . . . .	.....	.....	.....	.....	.....
	Dorset . . . . .	.....	.....	.....	.....	.....
	Gloucester	† 45	24	—	—	—
	Hereford	28,123	6,703	4'20	4'33	0'13
	Monmouth . . . . .	.....	.....	.....	.....	.....
Div. No. 4.	Salop	462	103	4'49	5'00	0'51
	Somerset . . . . .	.....	.....	.....	.....	.....
	Wilts . . . . .	.....	.....	.....	.....	.....
	Worcester	8,979	2,910	3'09	5'45	2'36
Div. No. 4. { (<i>No Hops grown in this Division</i>) }						
.....						

* Computed.

† Produce of 12 acres only, the remaining 12 acres having been broken up.

Criminal Returns for 1883-4, taken from the last official report issued from the Home Office, and including the numbers for the preceding year, and the numbers under the corresponding headings for 1873-4 :—

Classes.	1883-4.			1882-3.			1873-4.		
	Males.	Fmls.	Total.	Males.	Fmls.	Total.	Males.	Fmls.	Total.
Known thieves and depre- dators :									
Under 16 years of age . . .	2,174	405	2,579	2,493	415	2,908	2,364	675	3,039
16 years and above . . .	9,973	3,156	13,129	11,006	3,425	14,431	11,646	3,753	15,399
Receivers of stolen goods :									
Under 16 years of age . . .	6	3	9	9	2	11	8	3	11
16 years and above . . .	858	285	1,143	839	283	1,122	1,260	438	1,698
Suspected persons :									
Under 16 years of age . . .	2,032	439	2,471	2,027	566	2,593	2,265	791	3,056
16 years and above . . .	12,938	3,488	16,426	13,602	3,753	17,355	16,161	4,191	20,352
Total :									
Under 16 years of age . . .	4,212	847	5,059	4,529	983	5,512	4,637	1,460	6,106
16 years and above . . .	23,769	6,929	30,698	25,447	7,461	32,908	29,067	8,382	37,449

Coroners' Inquests (England and Wales). The following were the inquests held in each of the years 1884 and 1883, distinguished under the different verdicts, according to the latest returns issued from the Home Office :—

Verdict.	1884.			1883.		
	Males.	Females.	Total.	Males.	Females.	Total.
Murder	88	104	192	89	88	177
Manlaughter	93	61	154	112	45	157
Justifiable homicide	3	1	4	4	1	5
Suicide or self-murder	1,537	488	2,019	1,437	507	1,944
Accidental death	8,721	2,828	11,549	8,792	2,747	11,539
Injuries, causes unknown	243	91	334	214	114	328
Found dead	1,748	916	2,664	1,945	998	2,943
Executed	13	3	16	13	1	14
Natural death :—						
From excessive drinking	270	148	418	272	163	435
Disease aggravated by neglect	61	60	121	72	82	154
Want (starvation), cold, exposure, etc.	128	103	231	148	94	242
Other causes	6,375	4,526	10,901	6,339	4,448	10,787
Total	19,280	9,323	28,603	19,437	9,288	28,725

Police and Constabulary. The following abstract, taken from the last official return shows the number of each rank of the Police and Constabulary for the whole of England and Wales, as given in the returns for the year ending September 29th, 1884, with the numbers for the previous year, and the increase or decrease in the numbers of each rank in 1883-4 :—

	1883-4.	1882-3.	Increase.	Decrease.
Two Commissioners and three Assistant Commissioners	5	4	1	—
Two District Superintendents of Metropolitan Police	2	3	—	1
Chief Constables of Counties	54	54	—	—
Head Constables of Boroughs	162	163	—	1
Superintendents	529	524	5	—
Inspectors	1,367	1,329	38	—
Serjeants	3,347	3,278	69	—
Constables	28,472	28,116	356	—
Additional Constables (appointed for special purposes)	486	466	20	—
Detective Officers	575	551	24	—
Total Police and Constabulary	34,999	34,488	513	2

Showing in the total number in 1883-4 an increase over 1882-3 of 511, or 1·48 per cent., and for the year 1883, as compared with 1882, an increase of 1,315, or 3·9 per cent. The total number gives one constable for every 775 of the estimated population for 1884; the total number in 1883 gave one for every 774 of the estimated population for that year. The total cost of the service for the year ending September 1884 was £3,476,000, which shows an increase of £108,322.

Cabinets, Principal Members of British (1868-85).

	Feb. 29, '68.	Dec. 9, '68.	Feb. 21, '74.	Ap. 28, '80.	June 24, '85.
Pr. Min. . .	Disraeli . . .	Gladstone . .	Disraeli . . .	Gladstone . .	Salisbury.
Ld. Chan. . .	Cairns . . .	{ Hatherley Selborne . .	Cairns . . .	Earl Selborne	Ld. Halsbury.
Chan. Exch. .	G. W. Hunt . .	{ Lowe Gladstone . .	Northcote . .	{ Gladstone Childers . .	Hicks-Beach.
Chief Secretaries.	{ Home . . . Gayth. Hardy	{ Bruce Lowe . . .	Cross . . .	Harcourt . .	Cross.
	{ For. . . . Ld. Stanley . .	{ Clarendon Granville . .	{ Derby . . . Salisbury	Granville . .	Salisbury.
	{ Col. . . . Buckingham . .	{ Granville . .	{ Carnarvon Hicks-Beach	{ Kimberley Derby . . .	F. Stanley.
	{ War Pakington . .	{ Kimberley . .	{ Hardy . . . Childers . .	{ Childers . .	W. H. Smith.
	{ India . . . Northcote . .	{ Cardwell . .	{ F. Stanley Salisbury . .	{ Hartington Hartington . .	Churchill.
Admir. . .	Corry . . .	{ Argyll . . .	{ Ward Hunt Goschen . .	{ Kimberley	Ld. G. Hamilton.
Trade . . .	Richmond . .	{ Childers Bright . . .	{ W. H. Smith Adderley . .	Northbrook . .	E. Stanhope.
		{ Fortescue . .	{ Visc. Sandon	Chamberlain .	

Clubs and Club Houses, Principal.

Name of Club.	Club House.	Estab- lished.	No. of Members.	Subscription.	
				Entrance.	Annual.
Albemarle . . .	25, Albemarle Street . . .	1875	500	8 8 0	5 5 0
Alexandra (Ladies Club).	157, New Bond Street, W. . .	1884	600	2 2 0	2 2 0
Alpine . . .	8, St. Martin's Place . . .	1857	No limit	1 1 0	1 1 0
Army and Navy . . .	36, Pall Mall . . .	1838	2,000	40 0 0	10 10 0
Arthur's . . .	69, St. James's Street . . .	1765	600	31 10 0	10 10 0
Arts . . .	17, Hanover Square . . .	1863	450	15 15 0	6 6 0
Arundel . . .	12, Salisbury Street, W.C. . .	1860	280	5 5 0	3 3 0
Athenæum . . .	107, Pall Mall . . .	1824	1,200	31 10 0	8 8 0
Bachelors' . . .	8, Hamilton Place, W. . .	1881	650	30 0 0	7 0 0
Badminton . . .	100, Piccadilly, W. . .	1876	1,000	21 0 0	7 7 0
Beaconsfield . . .	68, Pall Mall . . .	1879	900	None	10 10 0
Boodle's . . .	28, St. James's Street . . .	1762	600	19 19 0	11 11 0
Brooks's . . .	60, St. James's Street . . .	1764	600	15 15 0	11 11 0
Burlington . . .	17, Savile Row . . .	1866	500	5 5 0	5 5 0
Carlton . . .	94, Pall Mall . . .	1832	1,600	30 0 0	10 10 0
Cigar Club . . .	6, Waterloo Place, S.W. . .	1880	No limit	5 5 0	5 5 0
City Carlton . . .	St. Swithin's Lane . . .	1868	1,000	15 15 0	8 8 0
City Conservative . . .	George Yard, Lombard Street . .	1883	1,500	10 10 0	5 5 0
City Constitutional . . .	Milk Street, Cheapside . . .	1884	1,500	5 5 0	5 5 0
City Liberal . . .	Walbrook . . .	1874	1,150	21 0 0	10 10 0
City of London . . .	19, Old Broad Street, E.C. . .	1832	800	31 10 0	8 8 0
Clergy . . .	135, New Bond Street . . .	1883	2,000	5 5 0	4 4 0
Cobden . . .	53, St. John's Park, N. . .	1866	960	None	3 3 0
Cocoa Tree . . .	64, St. James's Street . . .	1746	350	5 5 0	4 4 0
Conservative . . .	74, St. James's Street . . .	1840	1,200	31 10 0	10 10 0
Constitutional . . .	14, Regent Street (temp. prem.) . .	1883	4,054	5 0 0	5 0 0
Crichton . . .	3 and 4, Adelphi Terrace . . .	1871	875	3 3 0	4 4 0
Devonshire . . .	59, St. James's Street . . .	1875	1,500	31 10 0	10 10 0
East India United Service . .	14, St. James's Square . . .	1847	1,200	30 0 0	8 8 0
Empire . . .	4, Grafton Street, Piccadilly . .	1881	3,000	31 10 0	10 10 0
Farmers' . . .	Inns of Court Hotel . . .	1843	600	1 1 0	1 1 0
Garrick . . .	15, Garrick Street, Covent Gar. . .	1831	650	21 0 0	8 8 0
German Athenæum . . .	93, Mortimer Street, W. . .	1869	500	15 15 0	6 6 0
Goodwood . . .	27, Dover Street, W. . .	1884	*	*	5 5 0
Grafton . . .	10, Grafton Street, W. . .	1863	984	5 5 0	3 13 6
Green Room . . .	20, Bedford St., Covent Garden . .	1877	250	5 5 0	3 3 0
Gresham . . .	1, Gresham Place, E.C. . .	1843	600	21 0 0	6 6 0
Guards' . . .	70, Pall Mall . . .	1813	350	31 10 0	11 0 0
Gun Club . . .	Wood Lane, Notting Hill . . .	1861	No limit	10 10 0	3 3 0
Hanover Square . . .	4, Hanover Square, W. . .	1874	1,765	10 10 0	8 8 0
Hogarth . . .	27, Albemarle Street, W. . .	1870	No limit	5 5 0	3 3 0
Hurlingham . . .	Fulham, S.W. . .	1869	1,500	15 15 0	5 5 0

Name of Club.	Club House.	Estab- lished.	No. of Members.	Subscription.		
				Entrance.	Annual.	
				None		
Isthmian	12, Grafton Street, W.	1882	1,200	21 0 0	10 10 0	
Junior Army and Navy	10, St. James's Street	1869	1,500		8 8 0	
Junior Athenæum	116, Piccadilly	1864	800	*	10 10 0	
Junior Carlton	Pall Mall	1864	2,100	28 7 0	10 10 0	
Junior Garrick	18, Adelphi Terrace	1867	600	5 5 0	4 4 0	
Junior United Service	Charles Street, St. James's	1827	2,000	40 0 0	7 7 0	
Kenel	6, Cleveland Row, St. James's	1874	300	5 5 0	5 5 0	
Law Society	103, Chancery Lane	1832	400	5 5 0	5 5 0	
Marlborough	52, Pall Mall, S.W.	1869	450	31 10 0	10 10 0	
Military and Royal Naval	16, Albemarle Street, W.	1881	600	None	6 6 0	
National	1, Whitehall Gardens	1845	550	15 15 0	8 8 0	
National Church Club	135, New Bond Street	1883	2,000	5 5 0	4 4 0	
National Liberal	Trafalgar Square (temp.prem.)	1882	4,500	6 0 0	4 0 0	
Naval and Military	94, Piccadilly	1862	2,000	36 15 0	8 8 0	
New Athenæum	3, Pall Mall East, S.W.	1878	1,000	3 3 0	4 4 0	
New Club	Covent Garden	1883	600	10 0 0	10 0 0	
New Thames Yacht Club	Caledonian Hotel, Adelphi	1868	500	5 5 0	3 3 0	
New United Service	8, Park Place, St. James	1881	No limit	10 10 0	7 7 0	
New University	57, St. James's Street	1863	1,100	31 10 0	8 8 0	
Oriental	18, Hanover Square, W.	1824	800	31 0 0	9 9 0	
Orleans	29, King Street, St. James's	1877	550	21 0 0	8 8 0	
Oxford and Cambridge	71, Pall Mall	1830	1,170	42 0 0	8 8 0	
Pall Mall	7 and 8, Waterloo Place	1870	750	15 15 0	8 8 0	
Press	Ludgate Circus	1882	No limit	1 0 0	3 3 0	
Portland	1, Stratford Place, Oxford St.	1816	250	21 0 0	7 7 0	
Prince's Racquet	Hans Place	1853	No limit	10 10 0	5 5 0	
Raleigh	16, Regent Street, S.W.	1858	800	26 5 0	10 10 0	
Reform	104, Pall Mall, S.W.	1834	1,400	42 0 0	10 10 0	
Regency	23, Albemarle Street, W.	1879	500	None	6 6 0	
Royal Canoe	11, Buckingham Street, W.C.	1866	200	2 0 0	1 0 0	
Royal London Yacht	22, Regent Street, W.	1838	500	5 5 0	4 4 0	
Royal Thames Yacht	7, Albemarle Street, W.	1823	1,000	21 0 0	7 7 0	
Russell Whist	55, Great Coram Street, W.C.	1870	700	1 1 0	3 3 0	
St. George's Chess	47, Albemarle Street, W.	1826	No limit	2 2 0	3 3 0	
St. James's	106, Piccadilly	1857	650	26 5 0	11 11 0	
St. Stephen's	1, Bridge Street, Westminster	1870	1,500	21 0 0	10 10 0	
Salisbury	10, St. James's Square	1880	1,200	None	10 10 0	
Savage	Savoy Place, W.C.	1857	400	5 5 0	5 5 0	
Savile	107, Piccadilly, W.	1868	600	10 10 0	5 5 0	
Scandinavian	80, Strand, W.C.	1875	300	None	3 3 0	
Scottish	39, Dover Street, W.	1879	1,500	10 10 0	7 7 0	
Smithfield Cattle	12, Hanover Square	1798	800	None	1 1 0	
Société Nation. Française	1, Adelphi Terrace	1880	1,000	2 2 0	2 2 0	
Thatched House	86, St. James's Street	1865	700	26 5 0	10 10 0	
Travellers'	106, Pall Mall	1819	750	31 10 0	10 10 0	
Turf	85, Piccadilly, W.	1868	550	31 10 0	15 15 0	
Union	Trafalgar Square	1822	1,000	32 11 0	7 7 0	
United Service	116, Pall Mall	1815	1,550	40 0 0	7 7 0	
United University	1, Suffolk Street	1822	1,000	31 10 0	8 8 0	
United Whist	4, Waterloo Place	1876	170	3 3 0	3 3 0	
Universities & Pub. Schs.	5, Park Place, St. James's	1877	1,000	None	6 6 0	
Victoria	18, Wellington Street, W.C.	1865	500	6 0 0	6 0 0	
Vine	8, St. James's Square	1883	1,000	3 3 0	5 5 0	
Wanderers'	9, Pall Mall	1875	1,600	10 10 0	8 8 0	
Whitehall	47, Parliament Street	1866	600	21 0 0	10 10 0	
White's	37, St. James's Street	1730	625	19 19 0	11 11 0	
Windham	11, St. James's Square	1828	650	32 11 0	10 0 0	

* Regulated by the Committee.

Belgian Budget for 1887.

Estimated Receipts	319,625,109f: £13,317,713
„ Expenditure	316,663,411f: £13,194,308
Surplus	2,961,698f: £123,405

Table of the British Empire

		Capital.	Area, Square Miles.	Population.
In The North Sea . . .	The United Kingdom of Great Britain and Ireland . . .	London . . .	121,115	36,400,000
	(b) Isle of Man, or Mona . . .	Castletown . . .	281	54,089
	(b) Jersey I.	St. Heliers } . . .	73	88,800
	(b) Guernsey, etc. Is.	St. Pierre . . .	3	2,001
	(c) Heligoland I. . . . .	....	
In The Mediterranean.	(c) Gibraltar	Gibraltar . . .	18 $\frac{1}{2}$	24,680
	(c) Maltese Is.	Valetta . . .	117	156,675
	(b) Cyprus I.	Nikosia . . .	3,584	186,173
In The Gulf of Aden . .	(d) Aden	Aden . . .	70	35,000
	(d) Perim I. . . . .	....	7	200
	(d) Kuria-Muria Is. . . . .	....	9	....
	(e) North Somali Coast . . . . .	....	....	....
	(e) Socotra I. . . . .	....	1,310	....
	(f) Musha and Efata Is. . . . .	....	....	....
In The Indian Ocean . .	(c) Mauritius I.	Port Louis . .	713	370,766
	(d) Rodriguez I. . . . .	....	
	(d) Seychelles Is.	Port Victoria } . . .	350	15,000
	(d) Amirante Is. . . . .	....	
	(d) Chagos Is. . . . .	....	
	(d) Keeling Is. . . . .	....	
	(f) Kerguelen Land, etc. . . . .	....	1,500 (about)	....
	(b) Ceylon	Colombo . . .	25,635	2,758,500
	(e) Maldiva Is. . . . .	....	....	....
In Asia	(c) The Empire of India . . .	Calcutta . . .	1,377,540	254,000,000
	<i>Provinces of British India.</i>			
	(d) Bengal	Calcutta . . .	156,200	66,691,456
	(d) North-West and Oude	Allahabad; Luck- Lahore {now	105,395	44,107,869
	(d) Punjab	Lahore . . .	104,975	18,000,000
	(d) Central	Nagpore . . .	84,208	8,200,000
	(d) British Burmah	Rangoon . . .	88,556	3,736,771
	(e) Upper Burmah.	Mandalay . . .	192,000	3,500,000
	(d) Assam	Ganhati . . .	....	14,881,426
	(d) Madras	Madras . . .	138,856	30,688,504
	(d) Bombay	Bombay . . .	123,142	16,489,274
	(e) Berar	Ellichpore . .	80,000	2,672,673
	(d & e) Native States (800 large and small)	....	500,000	55,000,000
	(d) Andaman and Nicobar Is.	Port Blair . .	880	20,628
	(c) Straits Settlements	Singapore . .	1,500	500,000
	(d) Singapore	Singapore . .	223	155,000
	(d) Penang	Georgetown . .	107	190,597
	(d) Province Wellesley	Georgetown . .	470	
	(d) Malacca	Malacca . . .	659	93,579
	(e) Perak . . . . .	....	....	....
	(e) Selangor . . . . .	....	....	....
	(e) Sungei Ujong . . . . .	....	....	....
In Asiatic Archipelago.	(c) Labuan I.	Labuan . . .	30	6,000
	(e) North Borneo	Elopura . . .	30,000	150,000
	(c) Hong-Kong I., with Kowloon and Lema Is.	Hong-Kong . .	32	160,402
	(c) Port Hamilton (3 Is.) . . . . .	....	5	2,000
In Australasia	(a) New South Wales	Sydney . . .	310,700	921,268
	(a) Victoria	Melbourne . .	87,884	961,276
	(a) South Australia	Adelaide . . .	903,690	313,322
	(d) Northern Territory	Palmerston . .	(included in above)	
	(a) Queensland	Brisbane . . .	668,497	399,913
	(b) Western Australia	Perth . . .	975,824	33,000
	(b) Tasmania	Hobart . . .	26,215	130,541
	(c) New Guinea (part) and Isles	Moresby . . .	88,457	137,500
	(d) Norfolk I.	Sydney Bay . .	19	300
	(d) Lord Howe I., etc. . . . .	....	5	20

and its Dependencies.

<i>Public Revenue.</i>	<i>Public Expenditure.</i>	<i>Imports.</i>	<i>Exports.</i>	<i>Date of Acquisition.</i>	<i>Government.</i>
88,000,000	89,800,000	390,018,569	235,987,583	....	Constitutional Monarchy.
55,514	51,883	....	....	1765	Lt.-Governor. <i>Tynwald.</i>
....	....	804,338	868,598	1066	{ Lt.-Governor. Court. <i>States.</i>
8,336	7,700	....	....	1807	{ Lt.-Governor. Court. <i>States.</i>
40,554	50,690	796,372	22,820	1704	Governor. Executive Council.
212,569	209,795	122,882	27,739	1800	Governor. Councils.
172,072	112,085	304,375	287,521	1878	High. Comr. House of Legislature.
83,300	133,300	2,000,000	1,500,000	1839	Resident and Officials. (Sub. Govt
....	....	....	....	1857	Officer. (Sub. Aden.) [Bomba y.
....	....	....	....	1857	(Sub. Aden.) Telegraph Station
....	....	....	....	1885	(Sub. Aden.) Protectorate.
....	....	....	....	1876	Protectorate. Sultan of Kishni.
....	....	....	....	1858	Unoccupied.
860,000	916,000	482,092	356,554	1810	Governor. Councils.
....	....	....	....	1810	Commissioners. (Sub. Mauritius.)
1,162,722	1,154,833	7,972,713		1787	Unoccupied. [Councils.
....	....			1795	Governor. Executive and Legislative
....	....			....	Sub. Ceylon (Native Govt.).
71,730,000	70,340,000	67,030,000	85,090,000	(First Settlement) 1611	Viceroy. Council. Departments.
....	....	....	....	(Empire) 1877	Lt.-Governor. Councils.
....	....	....	....	....	Lt.-Governor.
....	....	....	....	....	Lt.-Governor.
....	....	....	....	....	Chief Commissioner.
....	....	....	....	....	Chief Commissioner.
....	....	....	....	1886	Military Commissioner.
....	....	....	....	....	Chief Commissioner.
....	....	....	....	....	Governor. Councils.
....	....	....	....	....	Governor. Councils.
....	....	....	....	....	Resident. (Sub. Hyderabad.)
....	....	....	....	....	Native Princes. Various systems.
703,168	647,606	22,700,000	20,800,000	....	Sub. to Gen. Gov. Penal Station.
....	....	....	....	1819	Governor. Councils.
....	....	....	....	1786	Resident Councillor.
....	....	....	....	1800	Resident Councillor.
....	....	....	....	1795	British Resident. Native Rajah.
....	....	....	....	1875	British Resident. Native Rajah.
....	....	....	....	1873	British Resident. Native Rajah.
....	....	....	....	1873	British Resident. Native Rajah.
4,589	4,210	81,474	82,311	1847	Governor. Council.
19,700	37,300	102,400	52,300	1877	Governor. Council. (Brit. N.B. Co.)
243,976	321,688	3,587,487	1,052,302	1841	Governor. Councils.
....	....	....	....	1884	Administrator.
7,117,592	6,853,189	22,826,985	18,251,566	1788	Governor. Parliament.
6,290,653	6,212,517	19,201,633	16,050,465	1851	Governor. Parliament.
2,024,928	2,398,191	5,749,353	6,623,704	1836	Governor. Parliament.
....	....	....	....	1864	Resident. (Part of S. Australia.)
2,720,656	2,819,854	6,381,976	4,673,864	1859	Governor. Parliament.
290,319	291,307	521,167	405,693	1829	Governor. Councils.
549,262	584,047	1,656,118	1,475,857	1825	Governor. Parliament.
....	....	....	....	1885	Commissioner.
....	....	....	....	1841	Magistrate. (N. S. Wales Govt.)
....	....	....	....	1856	No authority.

Table of the British Empire

		Capital.	Area, Square Miles.	Population.
In The Pacific Ocean .	(a) New Zealand	Wellington .	104,403	564,304
	(d) Chatham Is., etc. . . . .	....	377	1,000
	(d) Kermadec Is. . . . .	....	100	....
	(c) Fiji Isles	Suva	7,740	126,000
	(d) Rotumah Is. . . . .	....	310	2,414
	(e) Tonga Isles	Tongatabu .	3,000	60,000
In America	(a) The Dominion of Canada	Ottawa	3,620,510	4,750,000
	Ontario	Toronto	101,733	1,973,228
	Quebec	Quebec	188,688	1,359,027
	Nova Scotia	Halifax	20,907	440,572
	New Brunswick	Fredericton . .	27,174	321,223
	Prince Edward I.	Charlottetown .	2,133	108,091
	Manitoba	Winnipeg	123,200	135,000
	(d) Keewatin . . . . .	....	500,000	10,000
	North-West Territories	Regina	2,665,252	56,446
	British Columbia	Victoria	341,305	60,000
	(d) Vancouver I. . . . .	....	....	....
	(d) Queen Charlotte I. . . . .	....	....	....
	(a) Newfoundland	St. John's . . .	40,200	161,389
	(d) Labrador . . . . .	....	....	....
	(d) Anticosti I. . . . .	....	....	....
	(c) British Guiana	Georgetown . .	85,000	257,473
	(c) British Honduras	Belize	7,562	27,452
In The North Atlantic.	(b) Bermuda Is.	Hamilton . . .	41	14,888
	(b) Bahama Is.	Nassau	5,794	43,521
	(b) Leeward Is.	St. John	720	119,546
	Antigua	St. John	108	34,151
	(d) Barbuda . . . . .	....	75	813
	Montserrat	Plymouth . . .	35	10,083
	St. Kitts	Basseterre . . .	68	41,001
	(d) Anguilla . . . . .	....	35	2,773
	Nevis	Charlestown . .	45	11,704
	Dominica	Roseau	290	28,211
	Virgin Is.	Tortola	64	5,287
	(b) Windward Is.	St. George . . .	629	114,000
	Grenada and Grenadine Is.	St. George . . .	133	42,403
	Tobago	Scarbro'	114	18,051
	St. Lucia	Castries	250	40,532
	St. Vincent	Kingstown . . .	132	40,548
	(c) Jamaica I.	Kingston	4,193	580,804
	(d) Turks and Caicos Is.	Grand Turk . .	223	4,778
	(c) Barbados	Bridgetown . . .	166	171,860
	(c) Trinidad	Port of Spain . .	1,754	153,128
In The South Atlantic.	(c) Ascension I. . . . .	....	35	50
	(c) St. Helena	Jamestown . . .	47	5,059
	(f) Tristan D'Acunha . . . . .	....	18	100
	(f) Trinidad Is. . . . .	....	9	15
	(c) Falkland Is.	Stanley	4,740	1,543
	(d) South Georgia . . . . .	....	1,570	nil.
In Africa	(a) Cape Colony	Capetown . . .	213,636	1,122,000
	(d) Transkeian Territories . . . . .	....	(12,000)	....
	(e) Basutoland . . . . .	....	10,293	127,700
	(e) Bechuanaland . . . . .	....	100,000	....
	(d) Walfisch Bay . . . . .	....	100	....
	(c) Natal	Pietermaritzberg	18,750	424,495
	(e) Zulu Coast	St. Lucia Bay .	....	....
	(c) West African Settlements	Freetown . . . .	....	....
	Sierra Leone, etc.	Freetown	600	60,546
	Gambia	Bathurst	21	14,150
	(c) Gold Coast Colony	Accra	16,650	520,000
	(d) Lagos, etc.	Lagos	20	75,270

and its Dependencies.

<i>Public Revenue.</i>	<i>Public Expenditure.</i>	<i>Imports.</i>	<i>Exports.</i>	<i>Date of Acquisition.</i>	<i>Government.</i>
£	£	£	£		
3,707,488	4,101,318	7,663,888	7,091,667	1840	Governor. Parliament.
....	....	....	....	1840	Magistrate } New Zealand.
....	....	....	....	1840	Magistrate }
91,523	98,468	434,522	345,344	1874	Governor. Officials.
....	....	....	....	1881	Magistrate. (Sub. Fiji.)
....	....	....	....	1881	Brit. Resident. Native Monarchy.
6,662,908	6,430,713	24,248,925	18,942,501	1763	Governor-General. Parliament.
} (included in general figures) }				1763	Lt.-Governor. Legis. Assembly.
				1763	Lt.-Governor. 2 Houses of Legis.
				1763	Lt.-Governor. 2 Houses of Legis.
				1714	Lt.-Governor. 2 Houses of Legis.
				1761	Lt.-Governor. 2 Houses of Legis.
				1798	Lt.-Governor. 2 Houses of Legis.
				1870	Lt.-Governor. Assembly.
				....	(Sub. Manitoba.)
				1870	Lt.-Governor. Council.
				1859	Lt.-Governor. Assembly.
				1858	(Part of B. Columbia.)
				1858	Governor. Parliament.
283,933	257,171	3,372,962		1713	Sub. Newfoundland.
....	....	....	....	....	Governor. Court of Policy. Com-
460,932	449,786	1,999,448	2,322,032	1814	Governor. Councils. [bined Court.
51,866	53,585	237,588	317,449	1786	
28,769	29,827	75,416	2,557	1609	Governor. Council. Assembly.
45,475	45,788	181,494	122,351	1783	Governor. Council. Assembly.
115,664	....	....	....	Fed. 1871	Governor. Council. Assembly.
45,295	42,607	169,500	177,807	1632	President and Island Secretary.
....	....	....	....	....	(Sub. Antigua.)
5,933	5,701	25,598	32,677	1632	President.
43,209	26,987	213,583	203,497	1632	President.
<i>included</i>	<i>with St. Kitts</i>	....	....	1632	Res. Magistrate. (Sub. St. Kitts.)
18,012	18,586	60,535	47,288	1763	President.
1,859	1,874	7,239	10,727	1666	President.
....	....	....	....	Fed. 1871	Governor-in-Chief. Council. Assembly.
51,488	45,260	153,421	213,116	1763	Colonial Secretary.
11,370	13,481	33,656	41,618	1763	Administrator.
46,118	39,592	191,191	145,865	1803	Administrator.
34,068	33,389	116,774	122,626	1763	Lt.-Governor.
561,286	544,970	1,548,708	1,483,989	1655	Governor. Councils.
....	....	....	....	1783	Comr. and Board. (Sub. Jamaica.)
157,762	153,148	1,156,229	1,318,878	1625	Governor. Council. Assembly.
476,458	471,190	1,179,473	2,769,727	1797	Governor. Councils.
<i>nil.</i>	<i>nil</i>	4,000	<i>nil</i>	1815	Naval Governor. (Admiralty.)
10,421	10,806	27,901	1,164	1673	Governor.
....	....	....	....	1815	No authority.
....	....	....	....	1815	No authority.
8,337	8,728	27,898	69,602	1771	Governor. Councils.
....	....	....	....	1833	(Sub. Falklands.)
7,533,592	5,374,982	5,260,697	7,031,744	1815	Governor. Parliament.
....	....	....	....	Act. 1885	Magistrates. (Cape Govt.)
....	....	....	....	1883	Resident. (Sub. Crown.)
....	....	....	....	1885	Administrator. (Sub. Crown.)
....	....	....	....	1878	Resident. (Cape Govt.)
610,936	746,808	1,675,850	957,918	1837	Governor. Councils.
....	....	....	....	1885	Protectorate.
....	....	464,081	377,055	....	Governor. Councils.
73,096	82,259	....	....	1787	(Govt. Settlements.)
28,866	23,862	....	....	1588	Administrator. Councils.
106,647	99,289	515,393	594,136	1661	Governor. Councils.
50,558	37,879	....	....	1861	Administrator. (Sub. Gold Coast.)

Rate of Income Tax charged each Year (1842—85). See REVENUE.

Year.	Rates of Duty of Incomes of—		Acts by which imposed.	Date of Act.
	£100 and under £150 a year.	£150 a year and upwards.		
1842	—	7d. in the £	} 5 & 6 V., c. 35.	June 22, 1842.
1843	—	7d. "		
1844	—	7d. "		
1845	—	7d. "		
1846	—	7d. "	} V., c. 4.	April 5, 1845.
1847	—	7d. "		
1848	—	7d. "		
1849	—	7d. "		
1850	—	7d. "	} 11 V., c. 8.	April 13, 1848.
1851	—	7d. "		
1852	—	7d. "		
1853	—	7d. "		
1854	5d. in the £	7d. "	14 V., c. 12.	June 5, 1851.
1855	10d. "	1s. 2d. "	15 V., c. 20.	May 28, 1852.
1856	11½d. "	1s. 4d. "	16 & 17 V., c. 34.	June 28, 1853.
1857	11½d. "	1s. 4d. "	17 V., c. 24.	June 16, 1854.
1858	5d. "	5d. "	} 18 V., c. 20.	May 25, 1855.
1859	6½d. "	9d. "		
1860	7d. "	10d. "		
1861	6d. "	9d. "		
1862	6d. "	9d. "	20 V., c. 6.	May 21, 1857.
			16 & 17 V., c. 34.	June 28, 1853.
			16 & 17 V., c. 34.	June 28, 1853.
			22 & 23 V., c. 18.	August 13, 1859.
			23 V., c. 14.	April 3, 1860.
			24 V., c. 20.	June 12, 1861.
			25 V., c. 22.	June 3, 1862.

Uniform duties on Incomes of £100 a year and upwards, with abatement of £60 on Incomes under £300.

1863	7d. in the £	26 V., c. 22.	June 8, 1863.
1864	6d. "	27 V., c. 18.	May 13, 1864.
1865	4d. "	28 V., c. 30.	May 26, 1865.
1866	4d. "	29 V., c. 36.	June 11, 1866.
1867	5d. "	30 V., c. 23.	May 31, 1867.
1868	6d. "	31 V., c. 2.	December 7, 1867.
1869	5d. "	31 V., c. 28.	May 29, 1868.
1870	4d. "	32 & 33 V., c. 14.	June 24, 1869.
1871	6d. "	33 & 34 V., c. 32.	March 25, 1870.
	Abatement extended to £80 on Incomes under £300.	34 V., c. 21.	May 25, 1871.
1872	4d. in the £	35 & 36 V., c. 20.	June 27, 1872.
1873	3d. "	36 V., c. 18.	May 15, 1873.
1874	2d. "	37 V., c. 16.	June 8, 1874.
1875	2d. "	38 V., c. 23.	June 14, 1875.
	Exemptions extended to Incomes under £150, and abatements to £120 on Incomes under £400.		
1876	3d. in the £	39 V., c. 16.	June 1, 1876.
1877	3d. "	40 V., c. 13.	June 11, 1877.
1878	5d. "	41 V., c. 15.	May 27, 1878.
1879	5d. "	42 & 43 V., c. 21.	July 3, 1879.
1880	6d. "	43 & 44 V., c. 20.	August 12, 1880.
1881	5d. "	44 V., c. 12.	June 3, 1881.
1882	6½d. "	45 & 46 V., c. 41.	August 10, 1882.
1883	5d. "	46 V., c. 10.	May 31, 1883.
1884	5d. "	47 & 48 V., c. 25.	July 3, 1884.
1884	6d. "	48 V., c. 1.	December 1, 1884.
1885	8d. "	48 & 49 V., c. 51.	July 9, 1885.

THE REVENUE.

I. An Abstract of the Gross Produce of the Revenue of the United Kingdom in the under-mentioned periods, ended March 31st, 1886, compared with the corresponding periods of the preceding year :—

1885-86.

1884-85

	Quarters ended				Quarters ended			
	June 30, 1885.	Sept. 30, 1885.	Dec. 31, 1885.	Mar. 31, 1886.	June 30, 1884.	Sept. 30, 1884.	Dec. 31, 1884.	Mar. 31, 1885.
Customs	£ 5,384,000	£ 4,271,000	£ 5,319,000	£ 4,913,000	£ 4,727,000	£ 4,799,000	£ 5,570,000	£ 5,225,000
Excise	5,585,000	5,670,000	7,845,000	6,360,000	5,925,000	5,980,000	8,100,000	6,595,000
Stamps	3,045,000	2,730,000	2,800,000	3,015,000	3,050,000	2,580,000	3,160,000	3,135,000
Land Tax	70,000	—	—	970,000	70,000	8,000	5,000	982,000
House Duty	535,000	65,000	20,000	1,230,000	580,000	82,000	20,000	1,203,000
Property and In- come Tax	2,435,000	755,000	1,200,000	10,770,000	2,305,000	605,000	845,000	8,245,000
Post Office	1,660,000	1,950,000	2,140,000	2,400,000	1,600,000	2,020,000	1,980,000	2,305,000
Telegraph Service	445,000	490,000	410,000	395,000	440,000	485,000	430,000	405,000
Crown Lands	80,000	65,000	130,000	105,000	80,000	65,000	130,000	105,000
Interest on Ad- vances	260,389	208,486	582,876	324,329	258,501	236,322	282,582	249,945
Miscellaneous	695,337	772,610	647,131	893,143	906,902	750,200	595,889	921,769
Totals	20,134,726	16,977,096	21,094,007	31,375,472	19,942,403	17,610,522	21,118,471	29,371,714

	Year ending March 31, 1886.	Year ending March 31, 1885.
Customs	£19,827,000	£20,321,000
Excise	25,460,000	26,600,000
Stamps	11,590,000	11,925,000
Land Tax	1,040,000	1,065,000
House Duty	1,850,000	1,885,000
Property and Income Tax	15,160,000	12,000,000
Post Office	8,150,000	7,905,000
Telegraph Service	1,740,000	1,760,000
Crown Lands	380,000	380,000
Interest on Advances	1,376,080	1,027,350
Miscellaneous	3,008,221	3,174,760
Totals	£89,521,301	£88,043,110

II. Increase and Decrease in the periods ended March 31st, 1886, as compared with the corresponding periods of the preceding year :—

	Quarter ended March 31st, 1886.		Year ended March 31st, 1886.	
	Increase.	Decrease.	Increase.	Decrease.
Customs	£ —	£ 312,000	£ —	£ 494,000
Excise	—	235,000	—	1,140,000
Stamps	—	120,000	—	335,000
Land Tax	—	12,000	—	25,000
House Duty	27,000	—	—	35,000
Property and Income Tax	2,525,000	—	3,160,000	—
Post Office	95,000	—	245,000	—
Telegraph Service	—	110,000	—	20,000
Crown Lands	—	—	—	—
Interest on Advances	74,384	—	348,730	—
Miscellaneous	—	28,626	—	166,539
Totals	2,721,384	717,626	3,753,730	2,215,539

Net Increase, £2,003,758

Net Increase, £1,538,191

III. An Account showing the Revenue and other Receipts in the quarter ended March 31st, 1886, the issues out of the same, the charges on the Consolidated Fund at that date, and the surplus or deficiency of the balance in the Exchequer on March 31st, 1886, in respect of such charges:—

Income received, as shown in Account I.	£	£
Amount raised by Treasury Bills:—		31,375,472
Under 48 & 49, Vict., cap. 44	250,000	
To replace Bills paid off	6,255,000	
Amount raised by Exchequer Bills issued to replace Bills paid off ...		6,505,000
Amount received in repayment of advances for Public Works, etc. ...		40,000
Amount received in repayment of advances for Greenwich Hospital and School		228,200
Charge on March 31st, 1886 (as below)	12,770,495	20,11
Paid out of Growing Produce in March quarter, 1886	7,831,631	
Portion of the Charge payable in June quarter, 1886	4,938,864	
To meet which there was in the Exchequer on March 31st, 1886	5,625,944	
Surplus Balance as below:—		
Great Britain	£80,230	
Ireland	606,850	
		687,080
		<u>£38,177,883</u>
Net deficiency of the Balance in the Exchequer to meet the charge on	£	£
December 31st, 1885, as per last account		4,933,895
Amount applied out of the Income to Supply Services		19,785,394
Amount advanced for Greenwich Hospital and School		1,079
Charge of the Consolidated Fund on March 31st, 1886, viz.:—		
Permanent Charge of Debt—		
Interest of the Permanent Debt	£4,181,866	
Terminable Annuities	949,705	
Interest of Exchequer Bills, etc.	39,034	
Management of the Debt	203,241	
		5,373,906
Interest and Sinking Fund on Loans for Local Purposes		72,916
Interest, etc., of Suez Canal Bonds		99,991
Principal of Treasury Bills		6,255,000
Principal of Exchequer Bills		49,000
Advances for Public Works, etc.		410,000
Other Consolidated Fund Charges:—		
The Civil List	£102,535	
Other Charges	407,147	
		509,682
		<u>12,770,495</u>
Surplus Balance in the Exchequer on March 31st, 1886, beyond the amount of the charge on the Consolidated Fund on March 31st, 1886, payable in June quarter, 1886		687,080
		<u>£38,177,883</u>

Her Majesty's Privy Council. (Each member of which is entitled to the prefix of Right Honourable.) Corrected to end of March, 1886.

President—Earl Spencer.

Aberdare, Baron	Barrington, Viscount	Brabourne, Baron	Canterbury, Arch-
Aberdeen, Earl of	Baxter, W. E.	Bradford, Earl of	bishop of
Acland, Sir Thomas	Beach, Sir M. Hicks,	Bramwell, Baron	Carlington, Baron
D., Bart.	Bart.	Breadalbane, Marquis	Carnarvon, Earl of
Ailesbury, Marquis of	Beauchamp, Earl	Bright, John	Carrington, Baron
Argyll, Duke of	Beaufort, Duke of	Bruce, Lord Charles	Chamberlain, Joseph
Ashbourne, Baron	Bentinck, G. A. F. C.	W. B.	Chaplin, Henry
Aveland, Baron	Blachford, Baron	Bury, Viscount	Childers, H. C. E.
Ayrton, A. S.	Blackburn, Lord	Cadogan, Earl of	Churchill, Lord R.
Baggallay, Sir Richd.	Booth, G. Sclater-	Cambridge, H.R.H.	Coleridge, Baron
Balfour, A. J.	Bourke, Hon. Robert	Duke of	Colville, Baron
Balfour, J. B.	Bouverie, Hon. E. P.		Connaught, H.R.H.
Bannerman, H. C.	Bowen, Sir Chas. S. C.		Duke of

Cork and Orrery, Earl
Cottesloe, Baron [of
Cotton, Sir Henry
Couch, Sir Richard
Coventry, Earl of
Cowper, Earl
Cranbrook, Viscount
Cress, Sir R. A.
Cubitt, George
Clerby, Earl of
De Tabley, Baron
Devon, Earl of
Devonshire, Duke of
Milke, Sir Charles W.,
Bart.
Ducie, Earl of
Duff, M. E. G.
Dufferin, Earl of
Dyke, Sir W. H., Bt.
Dunbury, Baron
Dunburgh, H.R.H.
Duke of
Elgin, Earl of
Elliot, Hon. Sir H. G.
Emly, Baron
Escher, Baron
Eversley, Viscount
Exeter, Marquis of
Fergusson, Sir Jas.,
Bart.
Fitzgerald, Baron
Fitzgibbon, Stephen W.
Folkestone, Viscount
Fry, Sir Edward
Frost, Wm. E.
Fuchs, G. J.
Framville, Earl
Frey, Earl
Framsbury, Baron
Framilton, Ld. George
Frammond, Baron
Frampton, Viscount
Frampton, Sir James
Framcourt, Sir W. G.
Frampton, G. Vernon-
Frambridge, Earl of
Framby, Earl of
Framington, Marquis
of [Bart.
Fram, Sir John, D.

Heneage, Edward
Herschell, Baron
Hertford, Marquis of
Hibbert, J. T.
Hill, Lord Arthur
Hobhouse, Baron
Holland, Sir Henry
T., Bart.
Hope, A. J. B. Beres-
ford-
Hubbard, J. G.
Huntly, Marquis of
Iddeleigh, Earl of
Ilchester, Earl of
Ingles, John
James, Sir Henry
Keating, Sir H. S.,
LL.D.
Kenmare, Earl of
Kensington, Baron
Key, Sir Astley C.,
G.C.B.
Kilcoursey, Viscount
Kimberley, Earl of
Lambert, Sir John
Latham, Earl of
Lawson, J. A.
Layard, Sir Austen
H., G.C.B.
Lefevre, George John
Shaw-
Lennox, Lord H. G.
C. G.
Lewisham, Viscount
Lindley, Sir N.
Loftus, Lord A. W.
F. S.
London, Bishop of
Lopes, Sir H. C.
Lopes, Sir Lopes M.
L., Bart.
Lorne, Marquis of
Lothian, Marquis of
Lowther, James
Lugard, Sir E.
Lumley, Sir J. Savile
Lyons, Viscount
Macdonald, Sir J. A.,
G.C.B.
Macdonald, J. H. A.

Malet, Sir Edw. B.,
G.C.M.G.
Mallet, Sir Louis
Malmesbury, Earl of
Manners, Ld. J. J. R.
Marjoribanks, Hon. E.
Marriott, W. T.
May, Sir T. Erskine
Mellor, J. W.
Monck, Viscount
Moncrieff, Baron
Monk-Bretton, Baron
Monkswell, Baron
Monson, Baron
Montagu, Lord R.
Morgan, George O.
Morrison, Sir R., B.D.
Morley, Earl of
Morley, John
Mount - Edgecumbe,
Earl of
Mount-Temple, Baron
Mowbray, Sir J. R.,
Bart.
Mundella, Anthony J.
Murray, Hon. Sir C.
A., K.C.B.
Napier and Ettrick,
Baron
Newdegate, Charles
Newdigate
Noel, Hon. G. J. [of
Normanby, Marquis
Northbrook, Earl of
Northumberland,
Duke of
Norton, Baron
Ottway, Sir Arthur J.
Bart. [B.
Paget, Sir Augustus
Paget, Lord C. E.
Peacock, Sir Barnes
Peel, A. W.
Peel, Sir Frederick
Peel, Sir Robt., Bart.
Penzance, Baron
Percy, Earl
Playfair, Sir Lyon,
K.C.B.
Plunket, Hon. D. R.

Poltimore, Baron
Ponsonby, Sir H. F.,
K.C.B.
Raikes, Henry Cecil
Richmond, Duke of
Ripon, Marquis of
Robinson, Sir H.G.R.
Rosebery, Earl of
St. Albans, Duke of
Salisbury, Marquis of
Sandford, Sir F. R.
Selborne, Earl of
Selwin-Ibbetson Sir
H. J.
Sherbrooke, Viscount
Smith, Sir M. E.
Smith, W. H.
Somerset, Lord H.
R. C.
Spencer, Earl
Stalbridge, Baron
Stanhope, Hon. Edw.
Stanley, Hon. Sir
F. A.
Stansfeld, J.
Strafford, Earl of
Sudeley, Baron
Suffield, Lord
Sydney, Earl
Tankerville, Earl
Thornton, Sir Edwd.
Thurlow, Lord
Thynne, Lord H. F.
Trevelyan, G. O.
Verney, Sir Harry,
Bart.
Villiers, Hon. Chas. P.
Wales, H. R. H.
Prince of
Walpole, Spencer H.
Waterford, Marquis
Watson, Baron [of
Westminster, Duke of
Winmarleigh, Baron
Wolverton, Baron
Wolff, Sir Henry D.
Wyke, Sir Charles
Lennox
York, Archbishop of.
Young, G.

Clerk of the Council—C. Lennox Peel, C.B.

Irish Council of Ireland. Corrected to the end of March, 1886.

President—The Right Hon. the Earl of Aberdeen, Lord Lieutenant.

Shbourne, Baron
All, J. T.
Unmerman, H. C.
Urry, C. R.
Urch, Sir M. Hicks
Bart.
Umore, Earl of
Uuen, Henry
Umbridge, Duke of
Uringford, Baron
Uatterton, H. E.
Uristian, J.
Ugan, W. H. F.
Utteloe, Baron
Uotton, Sir W.

Dowse, R.
Drogheda, Marquis of
Dyke, Sir W. H. Bart.
Fitzgerald, Baron
Fitz-Gibbon, Gerald
Flanagan, S. W.
Forster, W. E.
Gregory, Sir W. H.
Harman, Col. E. R.
King
Hartington, Marquis
of
Headford, Marquis of
Holmes, H.
Johnson, W. M.

Kavanagh, Arthur
Mac M.
Keenan, Sir Patrick J.
Lawson, J. A.
Leinster, Duke of
Lowther, J.
May, G. A. C.
Meath, Earl of
Michel, Gen. Sir J.,
G.C.B.
Monck, Viscount
Monroe, John
Morley, John
Morris, Sir M.
Naish, John

O'Connor, Don, The
Ormsby, H.
Pallas, C.
Peel, Sir R. Bart.
Porter, A. M.
Steel, Gen. Sir T. M.
Trench, Archbishop
Trevelyan, G. O.
Wales, Prince of
Walker, Samuel
Warren, R. R. [of
Waterford, Marquis
Weimar, Prince
Edward of
Winmarleigh, Baron

Wreck Statistics :

VESSELS.		Total Losses.	Vessels Lost.	Tonnage.	Serious Casu.	Minor Casu.	Total.
UNIT. KING.							
1883-4	614	103		245,501	1560	3501	5778
1882-3		5810		277,490	4599		5409
1881-2		906		290,287	656 steam. 904 others.		
1880-1		956		282,679	1560		
1876-7		730		218,461	1714	3357	5801
BRIT. POSS.							
1883-4	368	18		73,862	704		1090
1882-3		374		69,157	673		1047
1881-2		397		88,137	Total Cas. 1881-2 greater, 1880-1 less, than 1883-4.		
1880-1		354		65,507			
1876-7		425		?	732		1157
LIFE.		Bel. to U. K.		Bel. to Brit. Pos.		Total.	
Crew from :							
Oversea	1373	} 1673		161	} 281	1534	} 1,954
Coasters	300		120	420			
Fishing	346		51	397			
Other craft	21		39	60			
Passengers from :							
Oversea	151	} 197		9	} 37	160	} 234
Coasters	46		28	74			
Fishing	2			2			
Other craft	6		9	15			
	2,245			417		2,662	

"Oversea" and "Coasting" include only lives lost in vessels reg. under the Merch. Ship. Acts.

"Fishing" includes lives lost in all fishing vessels.

"Other Craft" includes the lives lost in all other vessels.

Baronets created in 1886 up to March 31st

Leighton, Frederick, P.R.A.
Walker, Andrew Barclay.
Alexander, Major-General Claude.
Dorington, John Edward.
Montefiore, Francis Abraham.
Stephen, George.
Brooks, William Cunliffe, M.P.
Green, Edward.
Paget, Richard Horner, M.P.
Ewing, Archibald Orr-, M.P.
Birkbeck, Edward.
Cook, Francis.

Knights created in 1886 to March 31st

[The title given last after each name is the conferred this year. Where other titles are given they are of anterior date.]

His Highness Syud Toorkee, Sultan of Muscat—G.C.S.I.
His Highness Maharaja Raja Mangal, Sinhalese—G.C.S.I.
His Highness Tahkt Sinhji—K.C.S.I.; Thakur Sahib of Bhaunagar—G.C.S.I.
Maharaj Pertab Singh, G.S.I.—K.C.S.I.
Colonel John Underwood Bateman-Champain R.E.—K.C.M.G.
Albert Kaye Rollitt, Esq., LL.D.—Kt.
George William Morrison, Esq., Town Clerk of Leeds—Kt.
William Hardman, Esq., Chairman of Surrey Sessions and Recorder of Kingston—Kt.
Oswald Walter Brierly, Esq., F.R.G.S.—Kt.
Dr. W. Roberts, of Manchester, Professor Victoria University—Kt.
General Sir Donald Stewart, G.C.B.—G.C.S.I.
General the Hon. Arthur Edward Hardinge, C.B.—K.C.B.
Lieut.-General the Hon. Sir Leicester Smyth, K.C.M.G., C.B.—K.C.B.
William Bartlett Dalby, Esq., M.B.—Kt.
William Grantham, Esq., one of the Justices of the High Court of Justice.—Kt.
James Crichton Browne, Esq., M.D., LL.D. F.R.S.—Kt.
Sir William White, K.C.M.G., H.M. Minister at Constantinople—G.C.M.G.
F. Lascelles, Esq., H. M. Agent and Consul General at Sofia—K.C.M.G.
Dr. Andrew Searle Hart, Vice-Provost of Trinity College, Dublin—Kt.
Dr. R. S. Ball, Astronomer Royal of Ireland—Kt.
General Sir F. C. Arthur Stephenson, K.C.B.—G.C.B.
Sir Henry T. Holland, Bart., M.P., K.C.M.G.—G.C.M.G.
Sir Charles Tupper, K.C.M.G., C.B.—G.C.M.G.
Sir John Kirk, K.C.M.G.—G.C.M.G.
Juland Danvers, Esq., Secretary Public Works Department, India Office—K.C.S.I.
Charles Russell, Esq., Q.C., M.P., Attorney-General—Kt.
Horace Davey, Esq., Q.C., Solicitor-General—Kt.
Sir Robert Burnett David Morier, K.C., H.M. Ambassador to the Emperor of Russia—G.C.M.G.
Hon. Francis R. Plunkett, H.M. Envoy Extraordinary and Minister Plenipotentiary to the Emperor of Japan—K.C.M.G.
Capt. R. F. Burton, H.M. Consul at Trieste—K.C.M.G.

Richard Nicholson, Esq., Clerk of the Peace for Middlesex—Kt.
 Algernon George, Duke of Northumberland—K.G.
 William, Marquis of Abergavenny—K.G.
 Henry, Duke of Norfolk—K.G.
 Duke of Edinburgh, K.G., etc.—K.C.B.
 Robert G. Raper, Esq.—Kt.
 Henry E. Watson, Esq.—Kt.
 Charles Douglas Fox, Esq.—Kt.
 Professor William Turner—Kt.
 Rt. Hon. Frederick Arthur Stanley, M.P., one of Her Majesty's Aides-de-camp—G.C.B.
 Rt. Hon. Sir Edward Baldwin Malet, K.C.B., Ambassador Extraordinary and Minister Plenipotentiary at Berlin—G.C.B.
 Colonel James Fraser, C.B., Commissioner of Police for the City of London—K.C.B.
 William Stuart Walker, Esq., C.B., Chairman of the Board of Supervision for the Relief of the Poor, and of Public Health, Scotland—K.C.B.
 Francis Brockman Morley, Esq., Chairman of the Middlesex Quarter Sessions, Exon. of H.M. Royal Body Guard and Yeoman of the Guard—K.C.B.
 Monier Williams, Esq., C.I.E., D.C.L., Boden Professor of Sanskrit in the University of Oxford—K.C.B.
 Admiral Sir Geoffrey Thomas Phipps Hornby—G.C.B.
 Hon. Col. and Lieut.-Col. Commandant Frederick Winn Knight, C.B.—K.C.B.
 Colonel John Hudson, Bengal Staff Corps—K.C.B.
 Admiral Arthur William Acland Hood—K.C.B.
 George Edward Paget, Esq., M.D.—K.C.B.

Cabinets, Foreign and Colonial. The following gives the names of the Cabinet, or Executive Council, or principal members of the Government, of each of the leading foreign States, and of the more important British Colonies:—

AUSTRALIA, SOUTH.

Governor—Sir W. C. F. Robinson, K.C.M.G.
Attorney General and Premier—Hon. John William Downer, M.P., Q.C.
Chief Secretary—Hon. John Cox Bray, M.P.
Treasurer—Hon. Simpson Newland, M.P.
Commissioner of Crown Lands and Immigration—Hon. James Hamilton Howe, M.P.
Commissioner of Public Works—Hon. John Brodie Spence, M.L.C.
Minister of Education—Hon. John Alexander Cockburn, M.P.

AUSTRALIA, WEST.

resident—The Governor, Sir F. Napier Broome, K.C.M.G.
Colonial Secretary—Hon. Malcolm Fraser, C.M.G.
Attorney-General—Hon. Alfred Peach Hensman.
Colonial Treasurer—Hon. Anthony O'Grady Lefroy, C.M.G.
Commissioner of Crown Lands and Surveyor-General—Hon. John Forrest, C.M.G.
Commissioner of Railways, and Director of Public Works—Hon. J. A. Wright, C.E.

AUSTRO-HUNGARY.

and R. Minister of the Imperial House and for Foreign Affairs—Count Gustav Kálnoky de Köröspatak.

Imperial Minister of Finance—Benjamin Kállay de Nagy-Kálló.
Imperial Minister of War—Count Arthur Bylandt-Rheidt.

MINISTERIAL COUNCIL FOR AUSTRIA.

Minister President, and Minister for Home Affairs—Count Eduard Taaffe.
Agriculture—Count Julius Falkenhayn.
Justice—Baron Alois Praizak.
Worship and Education—Chevalier Gautsch de Frankenthurn.
Military Service—Count Zeno von Welsersheimb.
Finance—Chevalier Dr. Julian Dunajewski.
Commerce—Baron Pino von Friedenthal.
Minister (without portfolio)—Baron Flofian Ziemialkowski.

HUNGARY.

Minister President—Koloman Tisza de Borosjenő.
Worship and Public Education—August Trefort.
Croatia, Slavonia, and Dalmatia—Koloman Bedekovich de Komor.
Justice—Dr. Theodor Pauler.
Finance—Count Julius Szápáry.
Public Works and Communication—Baron Gabriel Kemény.
Minister at H. M. Court—Baron Bela Orczy.
Military Service—Count Gedeon Raday, jun.
Agriculture, Manufacture, and Commerce—Count Paul Széchenyi.

BELGIUM.

Finance—M. A. Beernaert.
Justice—M. J. De Volder.
Home and Public Instruction—M. J. J. Thonissen.
Foreign Affairs—Prince O. de Caraman-Chimay.
Agriculture, Industry, and Public Works—Chevalier de Moreau.
War—Gen. C. Pontus.
Railways, Posts, and Telegraphs—M. J. H. P. Vanden-Peeereboom.

BRAZIL.

Premier and Minister of Foreign Affairs—Baron de Cotegipe.
Minister of the Empire—Baron de Mamoré.
Justice—Joaquin Delphino Ribeiro da Luz.
Finance—Francisco Belisario Soares de Souza.
Marine—Alfredo Rodrigues Fernandes Chaves.
War—Jonc José de Oliveira Junqueira.
Agriculture, Commerce, and Public Works—Antonio da Silva Prado.

BULGARIA.

Premier and Minister of Interior—M. Karavelof.
Foreign Affairs—M. Tzanof.
Justice—M. Radoslavieff.
War—Col. Nikolaief.

[This list is incomplete, as several changes are in progress.]

CANADA.

Governor General—Most Hon. the Marquis of Lansdowne, G.C.M.G.
Premier—Rt. Hon. Sir John A. Macdonald, G.C.B. (*President of Council and Superintendent-General of Indian Affairs*).
Minister of Finance—Hon. A. W. McLellan.
Justice—Hon. J. S. D. Thomson.
Public Works—Hon. Sir Hector L. Langevin, K.C.M.G., C.B.
Agriculture—Hon. John Carling.

Railways and Canals—Hon. John Henry Pope
Customs—Hon. Mackenzie Bowell.
Interior—Hon. Thos. White.
Militia and Defence—Hon. Sir Adolphe Caron,
 K.C.M.G.
Marine and Fisheries—Hon. George Foster.
Postmaster-General—Hon. Sir Alex. Campbell,
 K.C.M.G.
Minister of Inland Revenue—Hon. John
 Costigan.
Secretary of State—Hon. Joseph Adolphe
 Chapleau.
(Without Portfolio)—Hon. Frank Smith.

CAPE OF GOOD HOPE.

*Governor and Commander-in-Chief in the
 Colony, and High Commissioner for
 South Africa*—Rt. Hon. Sir Hercules
 G. R. Robinson, P.C., G.C.M.G.
Private Secretary—F. J. Newton, Esq.
Imperial Secretary to High Commissioner—
 Graham Bower, R.N.

The Cabinet Ministers are:—

Premier and Attorney General—Hon. Thomas
 Upington, M.A., Q.C., M.L.A.
Colonial Secretary—Hon. John Tudhope,
 M.L.A.
Treasurer of the Colony—Hon. John Gordon
 Sprigg, M.L.A.
*Commissioner of Crown Lands and Public
 Works*—Hon. Friedrich Schermbrucker,
 M.L.A.
Secretary for Native Affairs—Hon. Jacobus
 Albertus de Wet, M.L.A.
 Permanent Heads of Departments.
Under Colonial Secretary—Hamden Willis,
 Esq.
Assistant Secretary—H. M. H. Orpen, Esq.
*Assistant Commissioner of Crown Lands and
 Public Works*—H. H. McNaughton, Esq.
Secretary Law Department—Joseph Foster, Esq.
Under Secretary for Native Affairs—J. Rose
 Innes, Esq., C.M.G.

DENMARK.

Prime Minister and Minister of Finance—
 J. B. S. Estrup.
Foreign Affairs—Baron O. D. Rosenoern-Lehn.
Justice and for Iceland—J. M. V. Nellesmann.
Worship and Education—J. F. Scavenius.
Home—H. P. Ongerslev.
War—Col. J. J. v. Bahnsen.
Marine—Commander N. F. Ravn.

EGYPT.

*President of the Council, and Minister of
 Foreign Affairs and of Justice*—Nubar
 Pasha.
*Minister of the Interior, and of War and
 Marine*—Abdekader Pasha.
*Minister of Public Works and (ad interim)
 of Public Instruction*—Abderrahman
 Rushdi Pasha.
Minister of Finance—Mustapha Fehmi Pasha.

FRANCE.

*President of the Council and Minister for
 Foreign Affairs*—M. de Freycinet.
Interior—M. Sarrien.
Finance—M. Sadi-Carnot.
Public Instruction—M. René Goblet.
Justice—M. Demôle.
Public Works—M. Baïhaut.
Commerce—M. Lockroy.
Agriculture—M. Denelle.

Post Office and Telegraphs—M. Granet.
War—M. Boulanger.
Marine—Admiral Aube.

GERMANY.

*President of the Prussian Ministry, Minister for
 Foreign Affairs and Commerce and Trade*
 —Prince von Bismarck.
Minister of the Interior—Von Boetticher.
Head of the Admiralty—Von Coppi.
Minister of Justice—Dr. von Schelling.
Minister of the Imperial Treasury—Von Bur-
 chard.
Minister of Railways—Vacant.
Minister of the Posts and Telegraphs—Dr. Von
 Stephan.
Minister of Public Works—Mazbach.
 [NOTE. There is no Minister of War for the
 Empire of Germany. The Imperial Army is
 under the supreme generalship of the Emperor,
 and there is a minister of war for each state of
 the Empire.]

GREECE.

*President and Minister for Foreign Affairs and
 Finance*—M. Théodore P. Deliyannis.
Marine—M. G. Bouboulis.
War—M. Aut. Mavromichalis.
Home Affairs—M. N. Papamichalopulo.
Justice Education—Mr. Ar. Contoguris.

INDIA.

Office of the Secretary of State in Council.
Secretary of State—The Earl of Kimberley.
Permanent Under-Secretary—John A. Godley,
 C.B.
Parliamentary Under-Secretary—Sir U. Kay-
 Shuttleworth, M.P.
Assistant Under-Secretary of State—Horace G.
 Walpole, C.B.

Council.

Vice-President, Lieut.-Gen. Richard Strachey,
 C.S.I., F.R.S.; Sir Robert Montgomery,
 G.C.S.I., K.C.B.; Sir Frederick J. Halli-
 day, K.C.B.; Major-Gen. Sir Henry C.
 Rawlinson, K.C.B., LL.D.; Sir Henry
 James Sumner Maine, K.C.S.I., LL.D.,
 D.C.L.; Col. Henry Yule, C.B., R.E.;
 Robert A. Dalryell, C.S.I.; Major-Gen.
 C. J. Foster, C.B.; Bertram Wodehouse
 Currie, Esq.; Hon. Sir Ashley Eden,
 K.C.S.I., C.I.E.; Major-Gen. Sir Peter
 S. Lumsden, G.C.B., C.S.I.; J. R. Bullen
 Smith, Esq., C.S.I.; Sir R. H. Davies,
 K.C.S.I., C.I.E.; Sir John Strachey,
 G.C.S.I., C.I.E.; and Gen. Sir Donald
 Stewart, Bart., G.C.B., G.C.S.I., C.I.E.
Clerk of the Council—Horace G. Walpole, Esq.,
 C.B.

Secretaries of Departments.

Military—Major-Gen. A. B. Johnson, C.B.
Financial—Henry Waterfield, C.B.
Judicial and Public—A. G. Macpherson.
Public Works, Railway, and Telegraph—Sir
 Juland Danvers, K.S.C.I.
Revenue Statistics and Commerce—W. G.
 Pedder.
Political and Secret—Col. Sir O. T. Burne,
 K.C.S.I., C.I.E.
The Supreme Government, Calcutta.
Viceroy and Governor-General—The Earl of
 Dufferin, K.P., G.C.B., etc.

Council.

Extraordinary Member—Gen. Sir F. Roberts,
 Bart., V.C., G.C.B., etc., Commander-in-
 Chief,

Ordinary Members—Lieut.-Gen. T. F. Wilson, C.B., C.I.E.; Courtenay P. Ilbert, C.S.I., C.I.E.; Sir S. C. Bayley, K.C.S.I., C.I.E.; Theodore C. Hope, C.S.I., C.I.E.; and Sir Auckland Colvin, K.C.M.G., C.I.E.

Additional Members for Making Laws and Regulations—The Lieutenant-Governor of Bengal; W. W. Hunter, C.S.I., C.I.E., LL.D.; H. J. Reynolds, C.S.I.; H. St. A. Goodrich, J. W. Quinton, G. H. P. Evans, R. Steel, Rao Sahel Vishvanath Narayan Mandlik, C.S.I. and Peari Mohan Mukerji.

Secretaries to the Government for India.

Home—Alexander Mackenzie.

Revenue and Agriculture—E. C. Buck.

Finance and Commerce—D. M. Barbour.

Foreign—H. M. Durand, C.S.I.

Military—Major-Gen. G. T. Chesney, R.E., C.S.I.

Public Works—Col. W. S. Trevor, V.C., R.E.

Legislature—D. Fitzpatrick.

ITALY.

President of the Council and Minister of the Interior—Signor Depretis.

Foreign Affairs—Count Carlo F. N. di Robilant.

Worship and Justice—Signor Diego Taiani.

Finance—Signor Agostino Magliani.

War—Signor Cesare Ricotti Magliani.

Marine—Signor Benedetto Brin.

Public Instruction—Professor Michele Coppino.

Public Works—Professor Francesco Genala.

Agriculture, Industry, and Commerce—Signor Bernardino Grimaldi.

NATAL.

The Executive Council of Natal consists of:—

Governor—His Excellency Sir A. E. Havelock, K.C.M.G.

Colonial Secretary—Hon. Sir C. B. H. Mitchell, K.C.M.G.

Chief Justice—Hon. Sir Henry Connor.

Commandant of H.M. Forces—Hon. Col. W. D. Bond.

Colonial Treasurer—Hon. J. T. Polkinghorne.

Attorney General—Hon. M. H. Gallwey, C.M.G.

Secretary for Native Affairs—Hon. H. C. Shepstone.

Colonial Engineer—Hon. A. H. Hime, late Lieut.-Col. R.E.

Nominated by Governor from Legislative Council—Hon. T. W. Garland, M.L.C., and Hon. G. C. K. Richardson, M.L.C.

NETHERLANDS.

Foreign Affairs—Jonkheer A. P. C. van Karnebeek.

Home Office—J. Heemskerk, *President of the Ministerial Council*.

Justice—M. W. Baron du Tour van Bellinchave.

Marine—Captain W. L. A. Gericke.

War—General A. W. P. Weitzel.

Finance—J. C. Bloem.

(Waterstaat) Commerce, and Industry—J. G. Van der Bergh.

Colonies—J. G. Sprenger Van Eyk.

NEW SOUTH WALES.

Governor—Rt. Hon. Lord Carrington, G.C.M.G.

Lieutenant-Governor—Hon. Sir A. Stephen, C.B., K.C.M.G.

Premier and Treasurer—Hon. Sir P. A. Jennings, K.C.M.G.

Colonial Secretary—Hon. G. R. Dibbs.

Attorney General—Hon. John H. Want.

Secretary for Lands—Hon. Henry Copeland.

Secretary for Public Works—Hon. W. J. Lyne.

Minister of Public Instruction—Hon. A. Renwick, M.D.

Minister of Justice—Hon. J. P. Garvan.

Postmaster General—Hon. F. B. Sutton.

Secretary for Mines—Hon. James Fletcher.

NEW ZEALAND.

Attorney General and Minister of Education—The Hon. Robert Stout, Premier.

Colonial Treasurer, Postmaster-General, Commissioner of Telegraphs, and Commissioner of Stamps—The Hon. Sir Julius Vogel, K.C.M.G.

Minister for Public Works—The Hon. Edward Richardson.

Native Minister, Minister of Defence, and Minister of Lands—The Hon. John Ballance.

Minister of Justice—The Hon. J. A. Tole.

Colonial Secretary—The Hon. P. A. Buckley.

Minister of Mines and Marine—The Hon. W. J. M. Larnach, C.M.G.

OTTOMAN EMPIRE.

Grand Visier—Kiamil Pasha.

President of the Council of State—Aarifi Pasha.

War—Ali Saib Pasha.

Marine—Hassan Pasha.

Interior—Munir Pasha.

Justice—Server Pasha.

Finance—Zuhni Effendi.

Public Instruction—Munif Pasha.

Commissioner of Works—Mazhar Pasha.

Commerce, Mines, and Agriculture—Hakki Pasha.

Public Works—Zuhdi Effendi.

Foreign Affairs—Said Pasha.

Director of Telegraphs—Izzet Effendi.

PORTUGAL.

(Ministry formed Feb. 20th.)

Premier and Minister of the Interior—Senhor Luciano de Castro.

Minister of Justice—Senhor Beirao.

Minister of Public Works—Senhor Navarro.

Minister of Finance—Senhor Marianno de Carvalho.

Minister of Marine—Senhor Henrique Macedo.

Minister of Foreign Affairs—Senhor Barros Gomes.

Minister of War—Viscount San Januario.

PRUSSIA.

Chancellor of the German Empire, Vice-President of the State Council, President of the Ministry, Minister for Foreign Affairs, Minister of Commerce and Trade, etc.—Prince von Bismarck.

Vice-President of the Ministry, Minister of the Interior, etc.—Von Puttkamer.

Minister of Public Works, etc.—Maybach.

Minister of Agriculture, Crown Lands, and Forests, etc.—Dr. Lucius.

Minister of Justice, etc.—Dr. Friedberg.

State Secretary of the Interior, etc.—Von Boetticher.

Minister of Public Worship and Education, etc.—Von Gossler.

Minister of Finance, etc.—Dr. von Scholz.

Minister of War, etc.—Lieut.-Gen. Brossart von Schellendorf.

QUEENSLAND.

President—His Excellency Sir Anthony Musgrave, K.C.M.G. (Governor).
Premier, Vice-President, and Colonial Secretary—Hon. S. W. Griffith.
Colonial Treasurer—Hon. J. R. Dickson.
Postmaster-General—Hon. R. B. Sheridan.
Secretary for Public Works and Mines—Hon. W. Miles.
Secretary for Public Lands—Hon. C. B. Dutton.
Attorney-General—Hon. A. Rutledge.
Secretary for Public Instruction—Hon. Chas. Stuart Mein.
Agent-General and Member of the Government—Hon. J. F. Garrick.
Clerk of the Executive Council—Albert Victor Drury.
Private Secretary to Premier—J. W. Woolcock.

RUSSIA.

PRINCIPAL MINISTERS OF STATE.

Imperial Household—Count Vorontzoff-Daschkoff.
War—General Vannovski.
Marine—The Grand Duke Alexis Alexandrovitch.
(Director of the Ministry)—Vice-Admiral Schestakoff.
Foreign Affairs—M. de Giers.
Interior—Count Tolstoy.
Public Instruction—M. Délianoff.
Finance—M. Bunge.
Lands—M. Ostrovsky.
Justice—M. Manascin.
Director of Ways and Communications—Admiral Possiett.
Comptroller of the Empire—M. Solski.
Director of the Emperor's Private Chancery—M. Tanéff.
Director of the Emperor's Private Chancery for the Institutions of the Empress Marie—M. Herardt.
Governor-General of Warsaw—Gen. Gourko.
Governor-General of Finland—Gen. Count Heyden.
Secretary of State for Finland—Baron Brown.

COMMITTEE OF MINISTERS.

President—De Reutern.
Members—Grand Duke Constantin Nicolaïévitch, Grand Duke Michael Nicolaïévitch, Count Tolstoy, Secretary Délianow, Secretary Baron Nicolai, M. Abaza, Secretary Nabokow, Secretary Solsky, Secretary De Giers, M. Stolanovsky, Admiral Possiett, M. Pobédonostzév, General Vannovsky, Secretary Ostrovsky, M. Frisch, Count Worontzow-Daschkow, Vice-Admiral Schestakow, M. Bunge, M. Herardt.

SERVIA.

Premier and Minister of the Interior—M. Garashanine.
Minister of War—Genl. Horvatovics.
Minister of Finance and Minister in Charge of the Department of Commerce—M. Mijatovics.
Minister of Justice—M. Marinkovics.
Minister for Foreign Affairs—Col. Franassovics.
Minister of Public Works—Col. Topalovics.
Minister of Public Worship—M. Kuzudsics.

SPAIN.

Prime Minister and President of the Council—Don Praxedes Mateo Sagasta.
Foreign Affairs—Don Segismundo Moret.
Justice—Don Manuel Alonso Martinez.
War—Captain General Don Joaquin Jovellar.
Marine—Don José Ma. Beranger.
Finance—Don Juan Francisco Camacho.
Interior—Don Venancio Gonzalez.
Trade, Agriculture, and Public Works—Don Eugenio Montero Rios.
Colonies—Don German Gamazo.

SWITZERLAND.

The chief executive authority in Switzerland, the "Federal Council," is practically equal to what is called "Cabinet" here. The President and Vice-President of the Council hold office for one year.

President for 1886—A. Deucher, of the Canton of Thurgau.
Vice-President for 1886—N. Droz, of the Canton of Neuchatel.

The other members of the Federal Council are:—Charles Schenk, Emile Welti, Louis Ruchonnet, W. F. Hertenstein, B. Hammer.

TASMANIA.

Premier and Chief Secretary—The Hon. Adye Douglas.
Attorney-General—The Hon. J. S. Dodds.
Treasurer—The Hon. W. H. Burgess.
Minister of Lands and Works—The Hon. N. J. Brown.

UNITED STATES OF AMERICA.

President of the United States and of the Cabinet—Grover Cleveland.
Vice-President—John Sherman.
Secretary of Treasury—Daniel Manning.
War—William C. Endicott.
Navy—William C. Whitney.
Postmaster-General—William F. Vilas.
Interior—Lucius G. C. Lamar.
Attorney-General—Augustus H. Garland.
 The above form the Cabinet.
Solicitor-General—John Goode.
Commissioner of Agriculture—Norman J. Coleman.
President of Board of Health—James L. Cabell, M.D.

VICTORIA.

Premier, Colonial Treasurer, and Commissioner of Railways and Roads—Hon. Duncan Gillies.
Chief Secretary—Hon. Alfred Deakin.
Attorney-General—Hon. Henry Wrixon.
Minister of Lands and Agriculture and of Mines—Hon. John Dow.
Minister of Public Instruction—Hon. Charles Pearson.
Commissioner of Public Works—Hon. John Nimmo.
Commissioner of Trade and Customs—Hon. W. F. Walker.
Minister of Justice—Hon. Henry Cuthbert.
Minister of Colonial Defence—Hon. James Lorimer.

No appointment has yet been made to the post of Postmaster-General.

Obituary, 1885 to end of March 1886.

* Now extinct. † Probably now extinct.
‡ Died 1886.

ROYALTY, ETC.

Alexander of Württemberg, Duke; father of Duke of Teck.
Alexander Lieven, Prince.
Alfonso XII., King of Spain.
Ameer of Bokhara, The.
[Anhalt, Hereditary Prince of.
Augustus of Württemberg, Prince.
Charles of Hesse, Princess; mother of Grand Duke of Hesse.
[Comtesse de Chambord.
Emma, Dowager Queen of Hawaii.
Ferdinand, King of Portugal; cousin of the Queen.
Frederick of Schleswig-Holstein, Duke; brother of King of Denmark.
Frederick Carl v. Hohenlohe, Prince; head of Catholic branch of Hohenlohe Family.
Grant, General U. S., ex-President of U.S.
Maharajah of Travancore, The.
Maharajah of Cashmere, The.
Maharane of Udiopore, The.
Mary of Montenegro, Princess.
Maximilian of Thurn und Taxis, Prince.
Mtesa, King of Uganda.
[Nicholas of Oldenburg, Duke; nephew of Tsar of Russia.
Robert of Orleans, Prince; son of Duc de Chartres.

PEERS.

Abercorn, Duke of.
[Amherst, Earl.
Avonmore, Viscount.
Aylesford, Earl of.
Borthwick, Baron.
Brougham, Baron.
Buckinghamshire, Earl of.
Cairns, Earl.
[Cardwell, Viscount.
[Chichester, Earl of.
Dudley, Earl.
Dunalley, Baron.
Dundonald, Earl.
Dupplin, Viscount.
Erne, Earl of.
Falkland, Admiral (Scotch Peer) Lord.
[Forester, Baron.
Guilford, Earl of.
Halifax, Viscount.
Houghton, Baron.
[Howard, Lady, sister of the Duke of Devonshire.
Huntingdon, Earl of.
[Kennedy, Lady Evelyn, eldest dau. of Marquis of Ailsa.
O'Hagan, Baron.
* Ranelagh, Viscount.
[Roths, Dowager Countess of.
St. Vincent, Viscount.
[Saltoun, Baron (Scotch Rep. Peer).
Selkirk, Earl of.
Shaftesbury, Earl of.
Sherard, Baron (I. B.).
Somerset, Duke of.
[Stradbroke, Earl of.
[Strathallan, Viscount (Scotch Rep. Peer).
* Strathnairn, Baron.
Teignmouth, Baron.

[Waveney, Baron.
Wilton, Earl of.

BARONETS.

Aylmer, Sir Arthur Percy.
Aylmer, Sir Justin G.
Bazley, Sir Thomas.
Beavor, Sir Thomas.
Blackett, Sir Edward.
[Burrell, Sir Walter W.
[Crawford-Pollok, Sir Hew.
Cuyler, Sir Charles.
[Dalyell, Sir R. A. Osborne.
Douglas, Sir George Scott.
Ferguson-Davie, Sir Henry R.
Freeling, Sir Arthur H.
Gethin, Sir Richard.
Glyn, Rev. Sir George L.
Gunning, Rev. Sir Henry.
[Harper-Crewe, Sir J.
Hay, Sir Robert.
Heron-Maxwell, Sir John.
[Houstoun-Boswall, Sir George.
* Knighton, Sir William.
Lampson, Sir Curtis.
Levinge, Sir Vere H.
Maxwell, Sir William, of Calderwood.
Milman, Sir William.
* Montefiore, Sir Moses.
Ogle, Sir William.
Phillimore, Sir Robert.
Reid, Sir John.
Ricketts, Sir Cornwallis.
[Ricketts, Sir H.
Scott, Sir Sibbald.
Stracey, Sir Henry J.
Stronge, Sir J. M.
Sullivan, Sir Edward.
Trelawney, Sir John.
Vavasour, Sir Edward.
[Webster, Sir A., T. D. Bart.
Wynn, Sir Watkin Williams, M.P.

M.P.s (not included under Baronets).

[Brook, John, Cheshire, Altrincham Division.
[Forster, Right Hon. W. E., Central Bradford.
Harrison, Sir G., South Edinburgh.
[McKane, Professor, Mid Armagh.

CLERGY.

Anderson, Bishop (formerly of Rupert's Land).
Anson, Canon, of Windsor.
Armagh, Archbishop of (Dr. Beresford).
[Banks, Rev. C. W., distinguished Nonconformist.
[Belli, Rev. A. C., sixty-seven years Precentor St. Paul's.
Blakesley, Dr., Dean of Lincoln.
Blore, Rev. Ed. W., Vice-Master of Trinity, Camb.
Blomfield, Canon, of Chester.
Blum, Dr., Bishop of Limburg.
Bona, Dr. Della, Prince-Bishop of Trente.
[Boyle, Hon. and Rev. Cavendish, a Chaplain to the Queen.
Brown, Rev. H. Stowell, Liverpool.
[Bruce, Rev. Lloyd Stewart, Canon of York.
Bulley, Dr. F., President of Magdalen, Oxon.
Burchell, Dr. R. P., R.-C. Abbot of Westminster.
[Burgess, Rev. Dr., vicar of Whittlesea.
[Butler, Dr. G., R.-C. Bishop of Limerick.
Chigi, Cardinal F.
Christie, Dr. W., Dean of Moray and Banff.
Clutterbuck, Rev. J. C.

Coffin, Dr., R.-C. Bishop of Southwark.
 Conybeare, Rev. Charles R., of Itchenstoke.
 Corrie, Dr., Master of Jesus Coll., Camb.
 Crossley, Rev. J., Chaplain H.M. Chapel Royal, Hampton Court.
 Currey, Dr. G., Master of the Charterhouse.
 Dixon, Dr., Archdeacon of Armagh.
 Down and Connor, R.-C. Bishop of (Dr. Dorrian).
 Edwards, Canon R. W.
 Ellacombé, Rev. H. T. (writer on Campanology), Bishop of (Dr. Woodford). [logy].
 Errington, R.-C. Archbishop.
 Ffoulkes, Ven. H., Archdeacon of Montgomery.
 Forcade, Monseigneur, Archbishop of Aix.
 Geden, Rev. Dr., Member of Old Testament Revision Committee.
 Golithly, Rev. C. P.
 Graves, Rev. J., secretary Royal Historical and Archaeological Society of Ireland.
 Griffiths, Rev. John, ex-Warden of Wadham, Oxon.
 Griffith, Rev. C., Prebendary of St. David's.
 Hannington, Missionary Bp. (Central Africa).
 Hartman, Dr., Chaplain at Cologne.
 Hood, Rev. E. Paxton.
 Howson, Dr. J. S., Dean of Chester.
 Humphry, Rev. W. G., Prebendary of St. Paul's, and Vicar St. Martin's-in-the-Fields.
 Jackson, Rev. R., Prebendary of St. Paul's.
 Jebb, Rev. Dr., Canon of Hereford.
 Jones, Canon W. H.
 Kay, Rev. W. Hon. Canon of St. Alban.
 Lasagni, Cardinal.
 Law, Dr., Dean of Gloucester.
 Lee-Warner, Canon.
 Lefroy, Dr., Dean of Dromore.
 Lincoln, Bishop of (Dr. C. Wordsworth).
 London, Bishop of (Dr. Jackson).
 Luard, Rev. T. G., Hon. Canon of St. Alban's.
 MacCabe, Cardinal, Archbishop of Dublin.
 McCloskey, Cardinal, Archbishop of New York.
 M'Lauchlan, Rev. D. T., Edinburgh.
 Manchester, Bishop of (Dr. Fraser).
 Miller, Rev. Charles, of Harlow.
 Moore, Ven. Joseph, Archdean of Isle of Man.
 Mufti, The, of Orenberg, head of Mohammedans in Russia.
 Nina, Cardinal, ex-Secretary of State to Pope Leo.
 North, Dr. J. E., R.-C. Canon of Southwark.
 Nuyts, Dr., Dean of St. Gudule's, Brussels.
 O'Brien, Dr. R. B., R.-C. Dean of Limerick.
 Panebianco, Cardinal.
 Patterson, Dr. R., the Abolitionist of California.
 Perkins, Rev. B. R., oldest beneficed clergyman.
 Pirie, Rev. Dr., of Aberdeen. [man].
 Poole, Dr., Missionary Bishop in Japan.
 Povah, Rev. Charles, eminent Wesleyan.
 Quin, Dr., R.-C. Bishop of Bathurst.
 Rees, Dr., President of Congregational Union.
 Salisbury, Bishop of (Dr. Moberly).
 Schwartzberg, Cardinal.
 Simpson, Canon.
 Smith, Rev. J., Oxford University.
 Stanford, Rev. Dr., distinguished Baptist.
 Sugden, Hon. and Rev. F.
 Sutton, Rev. Augustus.
 Trench, Rev. F. Chenevix.
 Trench, Dr. R. Chenevix, Archbishop of Dublin. [sity].
 Tulloch, Dr., Principal St. Andrew's University.
 Turner, Rev. Dawson W., of Liverpool.
 Vital, Monsignor, Bishop of Mogilef (Russia).
 Webb, Rev. Benj., of St. Andrews', Wells St.
 Williams, Dr., Dean of Grahamstown.
 Worsley, Dr., Master of Downing, Cambridge.

LAWYERS AND LEGAL.

Arnould, Sir J.
 Aspinall, T. R., Q.C., Recorder of Liverpool.
 Aston, J. J., Q.C.
 Benson, Ralph A., Metropol. Police Magistrate.
 Brooke, F. Capper, ex High Sheriff of Suffolk.
 Cairns, Earl, Lord Chancellor of England.
 Chambers, Montagu, Q.C.
 Cole, Henry T., Q.C.
 Coote, Henry C., F.S.A.
 Cope, William, Recorder of Bridgnorth.
 Crosse-Bright, T. J. P. and D.L. for Lancashire, formerly M.P. for Wigan.
 Edwards, John, Q.C.
 Fegen, F. J., C. B., Naval Counsel to Duke of Edinburgh.
 Flowers, Mr., Magistrate at Bow St. Police Court.
 Follett, B. S., Q.C., Chief of the Land Registry.
 Glossop, F. H. N., Chairman Brentford Bench.
 Gossett, Major A., P. Jfor Kent.
 Hanson, Alfred, Controller Probate, Legacy and Succession Duties.
 Hargrave, Judge, of Sidney.
 Ker, Alan, Judge, of Jamaica.
 Lomax, James, J. P. and D.L. for Lancashire.
 Meadowbank, Lord, Scottish Judge of Session.
 Murray, W. P., Registrar in Bankruptcy.
 Nelson, Sir Thomas, City Solicitor.
 O'Hagan, Lord Chancellor of Ireland.
 Pepys, P. H., late Registrar Court of Bankruptcy.
 Pring, Justice, of Queensland.
 Robertson, J. E. P., Chancellor of St. Albans and Rochester.
 Robinson, Serjeant, of Dublin.
 Schwarze, F. Oscar von, German jurist.
 Skinner, A. M., Q.C.
 Sullivan, Sir Edward, Lord Chancellor of Ireland.
 Sumner, Judge.
 Tels, H., the Dutch jurist.
 Walsh, F., Q.C., Judge of Bankruptcy in Ireland.

LITERARY MEN (see also next Section).

About, Edmond, French novelist and historian.
 Aksakoff, Ivan S., Russian littérateur, and founder of the Slavophile party in Russia.
 Alderson, J. B. "the Old Chartist Guard."
 Assolant, Alfred, French novelist and critic.
 Bailey, Hy., editor of *Bailey's Sporting Mag.*
 Baschet, M. Armand, French historian.
 Birch, Dr. S., of British Museum, Egyptologist.
 Bradshaw, Henry, Librarian Cambridge Univ.
 Capen, Dr. Nahum, American author and publisher.
 Carruthers, R.
 Chastel, Prof., Swiss theologian and historian.
 Collins, Mrs., authoress, widow of Mortimer Collins.
 Colquhoun, John.
 Cradock, Dr., Principal Brazenose College, Oxford.
 Curtius, Prof. G., Greek historian.
 Fergus, F. J. ("Hugh Conway"), novelist.
 Ferguson, James, F.R.S., writer on art and architecture.
 Findlater, Dr. Andrew.
 Fullarton, Lady Georgiana, novelist.
 Hebbel, M. Jules (P. H. Stahl), publisher and writer.
 Hugo, Victor.
 Jerrold, Evelyn.

Lange, Prof. Ludwig, of Leipzig.
 Mackenna, Senor Vicuna, Chilian author and journalist.
 Maffei, Andrea, Italian poet.
 Mayer, Joseph, F.S.A., archæologist.
 Miller, M. Emmanuel, Hellenist and palæo-graphist.
 Munro, Prof. H. A. J., editor of "Lucretius."
 Noailles, Duc de, oldest member of French Academy.
 Odynice, Polish poet.
 Oliphant, Mrs. Lawrence, authoress.
 Philipps, Dr., editor *Volks-Zeitung*.
 Rossetti, Constantin, Roumanian poet.
 Rye, E. C., entomologist.
 Sharp, Principal, Prof. of Poetry at Oxford.
 Shaw, Henry W. ("Josh Billings"), humourist.
 Somerville, Alexander.
 Stevens, Henry, F.S.A., American bookseller.
 Taylor, Sir H.
 Thoms, W. J., F.S.A., antiquarian.
 Tucker, Charles, F.S.A.
 Vaughan, Professor Henry Halford.
 Vaux, W. S. W.
 Veitch, Dr. W., Greek grammarian.
 Walford, Cornelius, writer on Insurance.
 Warner, Susan ("Elizabeth Wetherell"), author of "Wide, Wide World," etc.
 Westropp, Hodder M., archæologist.
 White, Richard Grant, critic.
 Worsæe, Prof., of Copenhagen.
 Zunz, Dr. L., German Hebraist.

SCIENTIFIC MEN AND DOCTORS.

Arnott, James Moncreiff, F.R.S.
 Baxter, Professor E. B., of King's Coll., Lond.
 Bodichon, Dr. Eugene.
 Buonfanti, Marquis de, explorer.
 Campbell, J. F., F.G.S., of Islay.
 Carpenter, Dr. W. B., F.R.S.
 Clare, John, of Liverpool, inventor of ships' iron-plates.
 Croall, Alexander, geologist.
 Davidson, Thomas, F.R.S.
 Davies, D. C., geologist.
 De Lutterotti, Dr. Ludwig, German linguist and archæologist.
 Foster, Cooper, surgeon.
 Frerichs, Professor, German surgeon.
 Guérin, Jules, "Father" of the French Academy of Medicine.
 Guy, W. A., F.R.S.
 Helmersen, George, Russian geologist.
 Jeffreys, Dr. J. Gwyn, conchologist.
 Jenkin, Professor, of Edinburgh.
 Jolly, Dr. Philip von, Prof. of Physics, Munich.
 Köhne, Baron de, heraldist and numismatist.
 Macdonald, Dr. Angus, Scotch physician.
 Milne-Edwards, Prof. M. H., French zoologist.
 Morris, Prof. John, F.G.S., geologist.
 Murray, A., geologist.
 Nachtigal, Dr., German African explorer.
 Peach, Charles W., naturalist and palæontologist.
 Ramsbottom, Robert, pisciculturist.
 Read, Raphael W., Deputy Inspector-General Army Hospitals.
 Schwand, Professor M., of Vienna.
 Sidey, Dr., of Edinburgh.
 Silliman, Professor B., of Yale College.
 Tolly, Edward, F.S.A., Professor of Chemistry.
 Tonklar, General von, Austrian Alpine-climber.
 Torrar, Dr. J., Chairman of Convocation, London University.

Streatfield, J. F., surgeon.
 Strudhoff, E., Austrian engineer.
 Talabot, F., French engineer.
 Thomas, Sidney Gilchrist, joint-inventor of Bessemer steel.
 Thorburn, Professor, M.D.
 Tschudi, F. von, Swiss Naturalist.
 Tylor, Alfred, anthropologist, etc.
 Watson, Professor M., F.R.S., of Manchester.
 Weldon Walter, F.R.S.
 Werder, Ludwig, inventor of Werder rifle.
 Yolland, Colonel William, F.R.S.
 Young, J. R., mathematician.

ARTISTS, MUSICIANS, AND ACTORS.

Ainger, Joseph, Viennese artist.
 Ansdell, Richard, R.A., animal painter.
 Baudry, Paul, French painter
 Benedict, Sir Julius, composer.
 Bond, R. Sebastian, landscape painter.
 Bressant, M., French actor.
 Caldecott, Randolph, artist.
 Canon, Hans, Austrian painter.
 Clément, M., French engraver.
 Crawford, E. T., R.A.
 Danby, Thomas, painter.
 Donaldson, T. L., architect.
 Ebersberg, Ottokar F., Austrian playwright.
 Goddard, G. Bouverie, animal and landscape painter.
 Haghe, Louis, Hon. President of Roy. Inst. Painters in Water Colours.
 Heilbronn, Mdlle., distinguished singer and actress.
 Henderson, Alex., manager Avenue Theatre.
 Hiller, Ferdinand, German composer.
 Huszar, Adolph, Hungarian sculptor.
 Jackson, Harry, actor.
 Jenkins, J. J., Member Roy. Soc. Water Colour Painters.
 Lebrun, Char., German actress.
 Maas, Joseph, tenor vocalist.
 Nathalie, Madame, French actress.
 Neuville, Alphonse de, French military painter.
 Penry, William, artist.
 Poole, James, landscape painter.
 Raab, George, Austrian miniature painter.
 Regnier, French comedian.
 Richards, Brinley, composer.
 Sainton-Dolby, Madame, singer.
 Schwenndenwein, August, Viennese architect.
 Spackman, Walter, American actor.
 Thorburn, Robert, miniature-painter.
 Thornycroft, Thomas, sculptor.
 Wardell, C. C. ("Charles Kelly"), actor.
 Wigan, Horace, comedian.
 Williams, Penry, painter, of Rome.
 Wyon, E. W., sculptor.

MILITARY AND NAVAL MEN.

Adye, General G.
 Anderson, General.
 Armstrong, Colonel F. M.
 Babington, General R. C.
 Barrow, Colonel.
 Bartlett, General H. T.
 Bellegrade, Count L., Field-marshal of Austria.
 Brown, General J. T. B.
 Browns, Lt.-Col. W. B.
 Budd, General R.
 Burnaby, Lt.-Col. F.
 Cadell, General A. T.
 Campbell, General J. D.

[Chute, General Sir Trevor.
 [Colville, Colonel, ex M.P. for South Derbyshire.
 Conolly, General J.
 Conway, General T. S.
 Cotton, General C.
 Courbet, Admiral of France.
 Craigie, General H. C.
 Crofton, General J. F.
 [Custance, General W. N., C.B.
 Dalison, Captain.
 Darvall, General.
 Dennis, Lt.-Col. John S., of Canada.
 Doherty, General E. H.
 Douglas, General C.
 Earle, General.
 Falkenstein, General von, of Germany.
 Fane, General Walter.
 [Fellowes, Admiral, Commander-in-Chief Channel Squadron.
 Flude, General T. P.
 Fox-Strangways, Colonel.
 Gambier, Admiral R. F.
 Gordon, General C. G.
 Gosling, General W. C. F.
 Graham, General F. W.
 Grant, General, ex President U.S.A.
 [Grant, General Sir J. T., Hon. Col. and batt. Connaught Rangers.
 [Hancock, General, U.S.A.
 [Harding, Lt.-Col.
 Harryngton, General J. C.
 Hastings, Colonel E. G.
 Hope-Dick, General.
 Hosken, Admiral James.
 [Hutchinson, Lt.-Col.
 Innes, General J. C.
 [Kendall, Captain J. J.
 Kennedy, Admiral J. J.
 [Knight, Major-Gen.
 Landers, General J. E.
 Lowry, Colonel A.
 Lyon, Colonel.
 Macan, General H.
 Macdonald, Captain James, R.E.
 Macintire, General A. W.
 McClellan, General, Governor of New Jersey.
 Manteuffel, Field Marshal of Germany.
 [Montgomery, General Sir R.
 [Moorshead, Admiral.
 Murray, General Freeman.
 [Norcott, General Sir W.
 O'Brien, General B.
 Parker, General R.
 Peile, Admiral M.
 Polwhele, General T.
 Pott, General.
 [Prior, Major-Gen.
 Rigaud, Maj.-General Gibbs.
 Rigby, General C. P.
 Serrano, Marshal, of Spain.
 [Somerset, General E. A.
 Stokes, Admiral J. L.
 Sturt, Colonel, C. N., ex M.P., for Dorchester.
 [Swords, Major-Gen. T., American officer.
 [Taylor, General G. R.
 Thompson, General R. L.
 Thomson, Colonel.
 [Tucker, Admiral.
 Tulloch, General A. T.
 [Tyrrwhitt, Lt.-Gen., Private Secretary Duke of Cambridge.
 Verner, General G.
 Wadeson, Colonel Richard, Lt.-Gov. Chelsea Hospital.
 Wardlaw, General R.

Wells, General S.
 Whistler, General T. K.
 Williams, General J. E.
 Wilson, Admiral J. C.

MISCELLANEOUS.

[Alderson, J. B., "the old Chartist Guard."
 [Apostol, N.I.M., Russian veteran of 1812.
 Assi, Adolphe, one of the founders of the *International*.
 Cameron, war-correspondent to *Standard*.
 Chaine, James, ex-M.P. for Antrim.
 [Chaloner, Tom, famous jockey.
 [Chimay, Prince de.
 Clay, John R., American diplomatist.
 Crawford, *Daily News* correspondent in Paris.
 [Czajkowski, Michael, Polish emigrant and novelist.
 Daners, Sir Jutland, K.C.S.I.
 Edwards, Mrs. ("the Maid of Llangollen").
 Fernandez, General, Pres. of Repub. of Costa Rica.
 [Fox, Ebenezer, Secretary to Cabinet, New Zealand.
 Godard, Louis, aeronaut.
 [Gough, J. B., temperance orator.
 [Gruzhnsky, Prince G. O.
 [Hack, Daniel P., Society of Friends.
 Hay, J. D. Drummond, British Consul at Valparaiso.
 [Hemans, G. W., son of the poetess.
 Hendriks, Vice-President of U.S.
 Herbert, St. Leger Algernon, war-correspondent to *Morning Post*.
 [Hoare, Joseph, banker.
 Howitz, chess-player.
 [Lemm, Mr., British Consul at Montevideo.
 Mackie, R. B., ex-M.P. for Wakefield.
 [MacIver, Charles, one of the founders of the Cunard line.
 Madden, Richard R., F.R.C.S., formerly Colonial Secretary of West Australia.
 Mahdi, The, of Egypt.
 Mason, Hugh, ex-M.P. for Ashton-under-Lyne.
 Medhurst, Sir Walter, consul in China.
 [Mellor, W., ex-M.P. for Stafford.
 Nottage, Alderman, Lord Mayor of London.
 Orloff, Prince, Russian diplomatist.
 Parkes, Sir Harry, K.C.B., minister at Peking.
 [Ransome, R. C., of Ransome, Sims & Head.
 [Reade, Edward A. R., Indian Civil Service.
 Richardson, G., Receiver and Accountant Gen., Post Office.
 [Roberts, G. W. R., killed in Upper Burma.
 [Saldanha de, Duchess.
 [Samsoe, Count, and Danish nobleman.
 [Stirton, George, aged 101, oldest Freeman in Europe.
 [Torlonia, Prince, banker.
 [Tecchio, Sebastiano, Italian politician.
 [Teachenberg, Baron Ernest Von.
 [Turner, Christopher, ex-M.P. for South Lincolnshire.
 Unruh, Herr von, President of Prussian National Association (1848).
 [Vallier, Comte de St., member of French Senate, and formerly ambassador at Berlin.
 Vanderbilt, W. H., American financier.
 Whetham, Sir Charles, ex-Lord Mayor of London.
 [Wiersbitzki, Otto von Corvin, German revolutionist and litterateur.
 [Wood, Shakspeare, correspondent to the *Times* at Rome.
 Yule, Sir G. Udny, C.B., Indian Civil Service.

The Hunting Packs of England, Scotland, and Ireland. (Corrected from *The Field*.)

STAGHOUNDS.

ENGLAND.

NAME OF HUNT.	MASTER.	KENNELS.
Her Majesty's	Marquis of Waterford	Ascot, Berkshire.
Berkhamstead	R. Rawle	Great Berkhamstead, Hertfordshire.
Devon and Somerset	Viscount Ebrington	Exford, Minehead, Somerset.
Enfield Chase	Col. A. P. Somerset	Enfield Court, Enfield.
Essex	S. H. M. Neave	Mill Green, Ingatestone.
Mid Kent	Herbert Leney	Wateringbury, near Maidstone, Kent.
New Forest	F. Lovell	Hinchelsea, Brockenhurst, Hampshire.
Norfolk	R. A. Barkley	Palgrave, Diss.
Rothschild's, Lord	Lord Rothschild	Ascott, near Leighton, Bedfordshire.
Surrey	T. Nickalls	Nutfield, near Redhill, Surrey.
Warnham	A. Labouchere	Mayes, Warnham, near Horsham.

IRELAND.

Down County	R. B. Ker	Montalto, Ballynahinch, co. Down.
Roscommon	Capt. M. J. Balfie	South Park, Castlereagh, co. Ros-
Ward Union	A Committee	Ashbourne, co. Meath. [common.]

FOXHOUNDS.

ENGLAND.

Albrighton	Sir T. F. Boughey	Whiston Cross, near Shifnal, Salop.
Atherstone	W. E. Oakeley	Witherley, near Atherstone, Warwicksh.
Badsworth	C. B. E. Wright	Badsworth, near Pontefract, Yorkshire.
Beaufort's, Duke of	Duke of Beaufort	Badminton, near Chippenham, Wiltshire.
Bedale	G. W. Elliott	Low Street, Bedale, Yorkshire.
Belvoir	Duke of Rutland	Belvoir, Grantham, Lincolnshire.
Berkeley	Lord Fitzhardinge	Berkeley Castle, Gloucestershire.
Berkeley, Old	H. Cox	Chorley Wood Common, near Rickmans-
Berkshire, Old	Col. Van der Weyer	[worth.]
Berkshire, South	and C. P. Duffield	Kingston Bagpuze, Abingdon.
Bicester and Warden Hill	J. Hargreaves	World's End, Reading, Berkshire.
Bilsdale	Lord Chesham	Stratton Audley, near Bicester, Oxon.
Blackmoor Vale	N. Spink	Kept by the Farmers.
Blankney	Merthyr Guest	Charlton Horethorne, Sherborne, Dorset.
Blencathra	Earl of Lonsdale	Blankney, Sleaford, Lincolnshire.
Bolder	J. Crosier	The Ridings, near Keswick, Cumberland.
Braes of Derwent	J. Robson,—Dodd	Byrness, Otterburn, Northumberland.
Bragg's, Mr.	Col. J. A. Cowen	Blaydon Burn, Blaydon-on-Tyne, Durham.
Bramham Moor	G. A. Bragg	Forden, Moretonhamstead, Devonshire.
Brocklesby	G. L. Fox	Bramham Park, Tadcaster, Yorkshire.
Burrow	Earl of Yarborough	Brocklesby Park, near Ulceby, Lincoln.
Burton	H. G. Hoare	Smallfield Common, Burstow, Surrey.
Camaldy's, Mr.	R. E. Wemyss	Reepham, Lincolnshire.
Cambridgeshire	V. P. Calmady	Tetcott, Holsworthy.
Cattistock	C. S. Lindsell	Caxton, near Cambridge.
Chepstow	Earl of Guildford	Sydling Court, Dorchester.
Cheshire, North	C. E. Lewis	St. Pierre, Chepstow.
Cheshire, South	Capt. E. Park-Yates	Forest Kennels, near Northwich.
Chiddingfold	H. R. Corbet	Adderley, Market Drayton, Salop.
Cheltenham	E. D. Gosling	Hyde Mile, Busbridge, Godalming.
Cornwall	J. Proud	Warrenby, near Redcar, Yorkshire.
Cornwall, North	Rev. E. M. Reynolds	Ambleside, Windermere.
Cornwall, South	E. C. Edw. Collins	St. Breward, Bodmin, North Cornwall.
Coryton's, Mr. W.	John Williams	Helston, Cornwall.
Cotswold	W. Coryton	Pentillie Castle, Saltash, East Cornwall.
Cotswold, North	W. Hicks Beach	Cotswold, Cheltenham.
Cottingham	A. Rushout	Broadway, Evesham, Worcestershire.
Cottingham	W. Baird	Barleythorpe, Oakham, Rutland.
Cranborne	Visc. Somerton	Woodgates, Cranborne, Salisbury.
Crawley and Horsham	Sir R. F. Sutton, Bt.	Walcot, near Hungerford, Berkshire.
Cromwell	Col. A. M. Calvert	West Grinstead, Horsham, Sussex.
Cromwell	E. Walter Greene	Kinnarsley, Severn Stoke, Worcester.
Cromwell	Sir Wilfrid Lawson and	
Cromwell	H. C. Howard	Roe Hill, Dalston, Carlisle.
Cromwell	Sir B. Cunard	Medbourne, Market Harborough.

NAME OF HUNT.	MASTER.	KENNELS.
Dartmoor	Admiral G. Parker ...	Woodlands, Ivybridge, South Devon.
Devon, South	H. S. Gaye	Ipplepen, Newton Abbot.
Dorset, South	W. F. Radclyffe	Bereheath, Wareham.
Durham, North	A Committee	Newton Hall, Durham.
Durham, South	Sir W. Eden, Bt.	Rushyford, near Ferry Hill, Durham.
Eskdale	A Committee	Abbey Plain, Whitby.
Essex, The	Sir H. Selwyn-Ibbetson ...	Harlow, Essex.
Essex, East	E. Jasser Coope	Rivenhall, Witham, Essex.
Essex Union	P. A. W. Carnegie	Billericay, Essex.
Essex and Suffolk	P. G. Barthropp	Stratford St. Mary, Colchester.
Exmoor	N. Snow	Oare, near Lynton, Devonshire.
Ferrers, Earl	Earl Ferrers	Staunton Harold, Leicestershire.
Fitzwilliam's, Earl	Earl Fitzwilliam	Wentworth, Rotherham, Yorkshire.
Fitzwilliam, The	Hon. T. W. Fitzwilliam ...	Milton, near Peterborough.
Flint and Denbigh	Owen J. Williams	Cefn, St. Asaph, North Wales.
Galway's, Lord	Visc. Galway	Grove, near Retford, Nottinghamshire.
Garswood	Hon. W. Gerard	Garswood, Lancashire.
Garth's, Mr.	T. C. Garth	Haines Hill, Twyford, Berkshire.
Glamorganshire	J. S. Gibbon	Llandough, near Cowbridge.
Glendale	F. W. Lambton	The Ninths, Milfield, Wooler, North-
Goathland	William Smith	Goathland, Yorkshire. [umberland.
Goodwood	Earl of March	Goodwood, near Chichester.
Gosling's, Mr. R.	R. Gosling	Manuden, Bishop Stortford.
Grafton, The	Hon. G. D. Pennant	Wakefield Lawn, Stony Stratford, Bucks.
H. H. (Hampshire)	A. H. Wood	Ropley, near Alresford, Hampshire.
Haldon's, Lord	Lord Haldon	Haldon House, Exeter.
Hambleton	W. Long	Droxford, Bishop's Waltham, Hants.
Herefordshire, North	H. L. Lutwyche	White Cross, Hereford.
Herefordshire, South	Capt. T. F. Lewis and Mr. H. Helme	Bryngwyn, near Hereford.
Hertfordshire	Capt. W. Peacocke	Kenesbourne Green, Luton.
Heythrop	A. Brassey	Chipping Norton, Oxfordshire.
Holderness	A. Wilson	Etton, near Beverley, Yorkshire.
Hursley	Colonel Nicoll	Pitt, near Winchester, Hampshire.
Hurworth	H. A. Wharton	Hurworth-on-Tees, Darlington, Durham.
Isle of Wight	Sir H. Daley	Marvel, Newport, Isle of Wight.
Jarvis, Mr.	G. E. Jarvis	Doddington Hall, Lincoln.
Johnstone's, Capt. F.	Hon. Capt. Johnstone	Snainton, Heslerton, Yorkshire.
Kent, East	E. R. Sworder	Elham, near Canterbury.
Kent, West	Hon. R. Nevill	Warren House, Otford, Sevenoaks.
Kent (Woodland), West	Lord G. Nevill	Eridge, near Tunbridge Wells.
Lamerton	G. Lobb	Lawhitton, Launceston.
Ledbury	A. Knowles	Ledbury, Herefordshire.
Llangibby	J. Lawrence	Llangibby, near Newport, Monmouth.
Ludlow	C. W. Wicksted	Onibury, Craven Arms, Salop.
Marshall's	W. N. C. Marshall	Dennington, Swymbridge, North Devon.
Meynell, The	R. Chandos Pole	Sudbury, Derbyshire.
Middleton's, Lord	Lord Middleton	Birdsall, near Malton, Yorkshire.
Mills, Mr.	Mr. John Mills	Bisterne, Ringwood.
Monmouthshire	F. Hanbury-Williams	Nant Oer, Abergavenny.
Morpeth	J. B. Cookson	Newminster, Morpeth, Northumberland.
N. F. H. (New Forest)	Major J. M. Browne	Furzy Lawn, Lyndhurst, Hampshire.
Neuaddfawr	T. H. R. Hughes	Neuaddfawr, Llanwnen, Llanybyther.
Newmarket and Thurlow	J. Gardner	Saxon Hall, Newmarket.
Norfolk, West	A. C. Fountaine	Narford, Swaffham, Norfolk.
Notts, South	Earl of Harrington	Gedling, Nottinghamshire.
Oakley	T. B. Miller	Milton Ernest, Bedfordshire.
Oxfordshire, South	C. Marrell	Stadhampton, near Wallingford.
Pembrokeshire	E. Vaughan	Fern Hill, Haverfordwest.
Pembrokeshire, South	Lt.-Col. H. Leach	Lawrenny, Pembrokeshire.
Pemllengare	W. Buckley	Rhos, near Llanelly, Carmarthenshire.
Percy's, Earl	Earl Percy	Greenrig, Lesbury, Northumberland.
Petworth	Lord Leonfield	Petworth Park, Sussex.
Portman's, Lord	Hon. W. H. B. Portman ...	Bryanston, near Blandford, Dorset.
Portsmouth's, Earl of	Earl of Portsmouth	Eggesford, North Devonshire.
Powell's, Mr. W. R. H.	W. R. H. Powell	Maesgwynne, Whitland R.S.O., S. Wales.
Puckeridge	F. Swindell	Buntingford, Hertfordshire.
Pytchley	H. H. Langham	Brixworth, Northamptonshire.
Pytchley, North	H. H. Langham	Brigstock, Thrapstone, Northampton.
Quorn	Lord Manners	Quorn, Loughboro', Leicestershire.
Radnorshire and West Hereford	Lt.-Col. R. H. Price	Castle Weir, Kington, Herefordshire.

NAME OF HUNT.	MASTER.	KENNELS.
Rayer's, Mr. W. C.	W. C. Rayer	Holcombe Rogus, Wellington, Somerset.
Rufford	T. H. D. Bayly	Rufford, Ollerton, Newark, Notts.
Selby's, Mr.	W. Selby	Biddleston, Rothbury, Northumberland.
Shropshire	A. P. Heywood-Lonsdale	Lee Bridge, Preston Brockhurst, near Shrewsbury. [Yorkshire.
Sinnington	R. Lesley	Jack Parker's Mount, Kirbymoorside,
Somerset, West	C. E. J. Esdaile	Bowerhayes, Carhampton, Taunton.
Southdown	Hon. C. Brand	Ringmer, near Lewes, Sussex.
Southwold	E. P. Rawnsley	Belchford, near Horncastle, Lincoln.
Staffordshire, North	Marquis of Stafford	Trentham, Stoke-on-Trent.
Staffordshire, South	C. Forster	Longton Lodge, Rugeley.
Stainton Dale	F. V. Forster, <i>dep.</i>	Burniston.
Suffolk	C. Leadley	Newton Cottage, Bury St. Edmunds.
Surrey, Old	J. Maulkin-King	Garston Hall, Kenley, Surrey.
Surrey Union	E. Byron	Worcester Park, Surrey.
Sussex, East	Col. Blake	Catsfield, Battle, Sussex.
Taunton Vale	C. A. Egerton	Henlade, Taunton, Somersetshire.
Tedworth	Capt. Fitzroy	Tedworth, Marlborough, Wiltshire.
Tickham	F. V. Williams	Wren's Hill, Faversham, Kent.
Tivyside	W. E. Rigden	Noyadd-Trefawr, Boncath R.S.O., S.W.
Tredegar's, Lord	Major Howell	Tredegar Park, Newport, Monmouth.
Tynedale	Lord Tredegar	Stagshaw Kennels, Corbridge-on-Tyne.
Ullswater	John C. Straker	Patterdale Hall, Penrith, Westmoreland.
United Pack	J. E. Hasell	Clun, Shropshire.
Vale of White Horse	J. Harris	Cricklade, Wiltshire.
Vine, The	C. A. R. Hoare	Overton, Micheldever, Hampshire.
Warwickshire	W. W. B. Beach	Kineton, Enderby, Warwickshire.
Warwickshire, North	Lord Willoughby de Broke	Kenilworth.
Western	F. L. Phillips	Madron, near Penzance, Cornwall.
Whaddon Chase	T. B. & T. R. Bolitho	Whaddon, near Stony Stratford, Bucks.
Wheatland	W. S. Lowndes	Wheatland, Bridgnorth, Salop.
Williams', Sir Wm.	W. T. Summers	Rothern Bridge, Torrington, N. Devon.
Wilts, South and West	Sir. W. Williams	Sutton Veney, Warminster.
Worcestershire	Capt. B. Helme	Fernhill Heath, near Worcester.
Wynnstay	F. Ames	Wynnstay, Ruabon, Denbighshire.
York and Ainsty	Sir W. W. Wynn, Bt.	Acomb, near York.
Zetland's, Earl of	C. E. York	Aske Hall, Richmond, Yorkshire.
	Earl of Zetland	

SCOTLAND.

Berwickshire	Hon. R. B. Hamilton & Lord Haddington	Langton, Dunse, N.B.
Buccleuch's, Duke of	Duke of Buccleuch	St. Boswell's, Roxburghshire.
Dumfriesshire	J. McKie, A. Johnstone, and J. A. Lyons	Leafield, by Lockerbie, Dumfriesshire.
Eglinton's, Earl of	Earl of Eglinton	Eglinton Castle, Irvine, Ayrshire.
Fife	Col. J. A. Thomson	Harleswynd, Ceres.
Fife, West	Capt. G. C. Cheape	Inchdairnie, by Leslie, Fife, N.B.
Linlathgow and Stirling	Col. D. C. Buchanan	Houston, Renfrewshire.
	J. G. Menzies	Golf Hall, Corstorphine, Edinburgh.

IRELAND.

Carbery	R. Beamish	Clonakilty and Skibbereen, Cork.
Carrow and Island	R. Watson	Ballydarton, co. Carlow.
Carraghmore	T. O. Springfield	Tinvane, Carrick-on-Suir.
Duhallow	C. W. Bagger	Doneraile, near Mallow, co. Cork.
Galway County	T. W. Anderson	Moyode Castle, Craughmell, near Athenry.
Humble's, Sir J. N.	Sir J. N. Humble	Cloncoshraine, Dungarvan, co. Waterford.
Kildare	Major R. St. L. Moore	Jigginstown, Naas, co. Kildare.
Kilkenny	Capt. S. G. Butson	Blunden Villa, Kilkenny.
Limerick County	J. G. Gubbins	Bruree, Kilmallock, co. Limerick.
Lismany	John Pollock	Lismany, Ballinasloe.
Louth	W. de Salis Filgate	Lissrennney, Ardee, co. Louth.
Meath	J. O. Trotter	Nugentstown, Kells, co. Meath.
Queen's County	R. H. Stubber	Moyne House, Durrow, Abbeylisc.
South Union	T. W. Knolles	Oatlands, Kinsale, co. Cork.
Tipperary	W. A. Riall	Fethard, Clonmel, co. Tipperary.
United Hunt	J. Murphy	Midleton, co. Cork.
Westmeath	Capt. Towers-Clark	Culleen, Mullingar.
Wexford	Capt. T. J. Walker	Tykillen, Wexford.
11th Hussars	Capt. K. Burrows	Ballingcollig, co. Cork.

HARRIERS. ENGLAND.

NAME OF HUNT.	HEIGHT AND BREED.	MASTER.	KENNELS.
Aberystwith	15 in.-Harriers	Mr. V. Davies	Tan-y-Bwlch, Aberystwith.
Airedale	19 in.	W. J. Knowles	Trencher-fed.
Anglesey .....	.....	A Committee	Llangefni, Anglesea.
Anglesey's, Marquis of .....	.....	Marquis of Anglesey	Plasnewydd Park, Llanfair P.G.
Ashford Valley	20 in.-Southern and F.	J. C. Buckland	New House, Shadoxhurst, Kent.
Ashton	22 in.-Southern	C. E. Ashworth	Lees New Road, Ashton-under-Lyne.
Aspull	22 in.-Southern	Mr. Gerard	Aspull House, Wigan, Lancashire.
Aston	18 in.-Harriers and Bloodhound	Sir T. C. Constable	Aston Hall, N. Ferriby, Brough, Yorks.
Avon Vale	20 in.-Mixed	Major J. W. Yeeles	Bathford, Bath.
Banwell and Weston-super-Mare	21 in.-Harriers .....	.....	Banwell, Weston-super-Mare.
Barkley's, Mr.	Harriers	R. A. Barkley	Palgrave, Diss.
Berkshire Vale	19 in.-Harriers	W. H. Milne	Burcote, Abingdon.
Bexhill	23 in.-Harriers	A. S. Brook	Cooden Down, Little Common, Bexhill, Hastings.
Biggleswade	18½ to 19 in.-Harriers	G. Race	Road Farm, Biggleswade.
Boxley	20½ in.-cross bred	H. A. Brassey	Preston Hall Park, Aylesford, Kent.
Brampton	19 in.-pure Harriers	H. B. Lonsdale	Sand Hill, Brampton, Cumberland.
Breconshire	18 to 19 in.-Harriers	F. Roche and Capt. Dickinson	Brecon, South Wales.
Brighton	20 in.-Foxhound Bitches	Sir F. Colville Ford	Patcham, Brighton, Sussex.
Brightling Park	19 in.-pure Harriers and Southern	D. Nicoll	Brightling Park, Hawkhurst.
Brookside	21 in.-Harriers	S. Beard	Rottingdean, near Brighton.
Burton and Peak Forest	Harriers and D. Foxh.	A Committee	Chapel-on-le-Frith.
Chappell-Hodge's, Mr.	22 in. Har. and D. F.	Mr. Chappell-Hodge	Pounds, near Plymouth.
Cobham .....	.....	T. H. Bennett	Cobham Court, Cobham, Surrey.
Cotley	20 in.-Harriers	T. P. Eames	Cotley, near Chard, Somerset.
Craven	22½ in.-Foxhounds	Capt. Henderson	Holme Bridge, Gargrave, Yorkshire.
Dart Vale	19 in.-Harriers	J. Michelmore	Staverton, Totnes, Devon.
Darvall	19 in.-Harriers	Capt. J. F. Darvall	Oxenham, S. Saunton, Devon.
Dove Valley	18 to 20 in.-F. & H. cross	Lieut. Col. Fleming	Birdsgrove, Mayfield, Ashbourne, Derby
Eamont	17 to 18 in.-Chiefly Har.	F. C. Cooper	Carleton Hall, Penrith.
Eastbourne	20½ in.-Harrier and Foxhound cross .....	.....	Green Street, Old Eastbourne, Sussex.
Easton Park	20 in.	W. L. Wallis	Easton, Wickham Market.
Edenbridge	23 in.-pure Southern	Duke of Hamilton	Ray Lodge, near Lingfield.
Eifonydd	18 in. Harriers	J. Dashwood	Broomhall, Pwllheli.
Epping Forest	20 to 21 in.-dwarf F.	Mr. O. Ll. Evans	Woodford, Essex.
Fowey	19 in.-cross bred	H. Vigne	Par Station, Cornwall.
Frittenden	23 in.-Old Southern	Mr. J. de C. Treffry	Little Spills Hill, Staplehurst, Kent.
Garswood	23 in.-Foxhound and Southern	Mr. W. U. Benfield	Garswood, Lancashire.
Gibbons', Mr.	18 in.-Harriers	Hon. W. Gerard	Boddington Manor, near Cheltenham.
Glaidsdale	17 to 19 in.-Crossbred	Mr. J. S. Gibbons	Glaidsdale R.S.O., Grosmont, Yorkshire.
H. P. H.	20 in.-H. and F. cross	G. Brown	Hertford.
Hambleton Vale	18 to 19 in.-Harriers	Mr. J. Chesshyre	Skirmitt, Henley-on-Thames.
Harvey's, Sir R. B.	19 in.-Harriers	E. K. Portal	Langley Park, Slough, Bucks.
High Peak	20 in.-Foxhounds	Sir R. B. Harvey, Bt.	Castle Hill, Bakewell, Derbyshire.
Hindon	18 in.-Harriers	R. W. M. Nesfield	Hindon, Minehead, Somerset.
Holcombe	22 in.-Harriers	J. Clarke	Holcombe, Ramsbottom.
Ilfracombe	19 in.-Harriers	W. Mucklow	Spreacombe, Ilfracombe.
Jenner's, Mr. B. St. A.	18 in.-Harriers	F. R. Carthew	Broadlands, Glamorgan.
Lamerton	18 in.-Harriers	Mr. B. St. A. Jenner	St. John's, Lamerton, Tavistock.
Legard's, Sir C.	21 in.-Foxhounds	Messrs. Bickell	Ganton, Yorkshire.
Lewes, Mr. T. P.	19 in.-Harriers	Sir C. Legard	Lylysnewydd, Llandysyll.
Malborough	18 in.-Harriers	T. P. Lewes	Malborough, Kingsbridge, Devon.
Marden	18 in.-F. and B. cross	Wm. Adams	Marden, Kent.
Marden Valley	18 in.-S. Harriers	H. and W. Drummond	Benover, Yalding, Kent.
Merthyr Old Court	Welsh Harriers	R. H. White	Merthyr Tydvil, Glamorganshire.
Mills', Mr.	18 in.-Harriers	L. P. Jones	Bisterne, Ringwood, Hants.
Missenden & Hamden Vale	18 in.-Harriers	J. Mills	Missenden Abbey, Bucks.
Modbury	19 in.-Harriers	Harding Cox	Modbury, Ivy Bridge, Devon.
Netherton's, Mr.	22 in.-Harriers	N. Potts and G. May	Bowden House, Dartmouth.
Newnham	Foxhounds	L. R. Netherton	The Poplars, Newnham-on-Severn.
Norfolk, North	18 in.-Harriers	F. Swindell	Bessingham, Norwich.
Norumberland and Durham	18 in.-Harriers	E. D. Spurrell .....	.....
Oxenholme	20 in.-H. and F. cross	F. H. Lamb	Cowgate, Kenton, Newcastle.
Pembroke's, Earl of	19 in.-Harriers	C. W. Wilson	Gatebeck, Kendal, Westmoreland.
Pendle Forest	22 in.-Southern and F.	Earl of Pembroke	Wilton House, near Salisbury.
Penistone	22 in.-Old S. and Har.	A Committee	Waddington, near Clitheroe, Lancashire.
Pigott's, Mr. C. S. ....	.....	W. Dransfield	Oxspring, Yorkshire.
Plas Machynlleth	19 in.-Harriers	C. S. Pigott	Ashcombe, near Weston-super-Mare.
Pynes	20 in.-Harriers	Lord H. Vane Tempest	Plas Machynlleth, North Wales.
Pryse, Mr. Vaughan	18 in.-H. and F. cross	H. C. Townsend	Steventone, Upton Pyne.
Q. H. (Quarme)	18½ in.-Harriers	J. P. V. Pryse	Bwlch Bychan, Llanybyther, S. Wales.
Ray's, Mr. F. H.	21 in.-pure F. Bitches	W. L. Chorley	Quarme, Dunster, Somerset.
Ripley and Knap Hill	19 to 20 in.-Fox	F. H. Ray	Finghall, Bedale, Yorkshire.
Roath Court	20 to 21 in.-Dwarf F.	Earl of Onslow	West Clandon, Guildford.
Rochdale	21 in.-crossbred	C. H. Williams	Roath Court, Cardiff.
Rockwood	22 in.-H. and F. cross	J. B. N. Entwistle	Ball Barn, Rochdale.
Romney Marsh	20 in.-Foxhounds	W. Norton	Rockwood, Denby Dale, Huddersfield.
Ross	18½ to 20 in.-H. and D. F.	W. D. Walker	Honeychild Manor, Kent.
.....	.....	C. W. Bell	Alton, Ross, Hereford.

NAME OF HUNT.	HEIGHT AND BREED.	MASTER.	KENNELS.
Rossendale	22 in.-pure Harriers ..	Major Hardman ..	Newchurch, Rossendale, near Manchester.
Severn Valley	19½ in.-Dwarf Foxh.	Capt. Hayhurst ..	Stonebridge, Welshpool.
Seavington	20 in.-mostly pure Har.	C. Langdon ..	Lopenhead, near Ilminster.
Shotesham	18 in.-Harriers ..	R. Fellowes ..	Shotesham Park, Norwich.
Sid Vale	20 in.-pure Harriers ..	J. D. Lang ..	Sidforth, Sidmouth, Devon.
Silverton	19 in.-Harriers ..	T. Webber ..	Ford, Silverton, Devon.
South Holland	20 in.-Dwarf Fox ..	C. T. Tunstard ..	Frampton House, Boston, Lincolnshire.
South Molton	18 in.-Harriers ..	S. P. Kellard ..	South Molton.
South Pool	20 in.-Harriers ..	A. P. Halifax ..	South Pool, near Kingsbridge, Devon.
St. Columb	19 in.-Harriers ..	R. Cardell ..	Trebelnis, St. Columb Minor.
Stannington	22 in.-Heavy H. ..	C. B. Speight ..	Millhouses, near Sheffield.
Stanton Drew	22 in. ..	A. B. James ..	Paradise, Chew Magna, near Bristol.
Tanat-side	18 to 19 in.-modern Har.	H. G. Lloyd ..	The Grange, W. Felton, Shropshire.
Teanton Vale	19 to 20 in.-Harriers ..	A Committee ..	J. Scarlett's, Taunton.
Teesdale	18 in.-Harriers ..	K. Hutchinson ..	Egglistone, Darlington.
Thanet	20 in.-D. Foxhounds ..	V. Frisby ..	Monkton Minster, Thanet.
Todmorden	21 in.-Harriers ..	J. Greenwood ..	Holme, Stansfeld, Todmorden, Yorks.
Treissick	20 in.-H. and D. F. ..	V. Jamieson ..	Treissick, Truro.
Tyne	17½ to 18½ in.-crossbred ..	Colonel Anderson ..	Jesmond House, Newcastle-on-Tyne.
V. C. H.	19 in.-cross bred ..	Major Birch ..	Maes Elwy, St. Asaph.
Vale of Lune	19 in.-Harriers ..	T. G. Edmondson ..	Low Bentham, Lancaster.
Waveney	20 in.-H. and Fox ..	Sir S. Crossley ..	Somerleyton Hall, Suffolk.
Wells Subscription	20 in.-Harriers ..	A Committee ..	Wells, Somerset.
West Street	20 to 21 in.-Fox ..	Earl Granville ..	Cold Blow, near Walmer, Kent.
Weymouth	20½ in.-Fox Bitches ..	M. B. Thompson, <i>dep.</i>	Radipole, Weymouth.
Whitehaven	18 in.-pure Harriers ..	W. Morris ..	Mirehouse, Hensingham, Whitehaven.
Wilbraham	17 in.-Harriers ..	J. H. Mackenzie ..	Great Wilbraham, Cambridgeshire.
Winchester	16 to 17 in.-Harriers ..	Edward Hicks ..	Winchester, Hampshire.
Wirral	21 in.-Foxhounds ..	James Dear ..	Leighton Hall, Neston, Chester.
Wolverton's, Lord	18½ in.-Harriers ..	J. J. Houghton ..	Iwerne Minster, Shaftesbury.
		Lord Wolverton ..	

SCOTLAND.

Middleton's, Capt.	18 in. cross-bred ..	Capt. J. A. Middleton ..	Strathrym, St. Andrews.
Sutherland & Caithness .. .. .	.. .. .	A Committee	Golspie, Sutherland, N.B.

IRELAND.

Allenstown	18 in.-pure Harriers ..	J. M. Purdon ..	Cloneymore, Athboy, co. Meath.
Altnaveigh	18 in.-Harriers ..	H. Thompson ..	Altnaveigh House, Newry.
Ballycross	18 in.-cross bred ..	W. H. Whitney ..	Mount Pleasant, Killinick, Wexford.
Barrymore .. .. .	.. .. .	M. Murray ..	Spring Hill, Riverstown.
Brooke's, Mr.	20 in.-Dwarf Foxhounds ..	G. F. Brooke ..	Pickering, Celbridge, co. Kildare.
Cooper Chadwick's, Mr.	19 in.-Harriers ..	R. C. Chadwick ..	Ballinard, Tipperary.
Cork	21 in.-pure Harriers ..	A Committee ..	Spring Lane, Cork.
Cruiceraeth	19 in.-cross bred ..	Mr. Belagh ..	Lchanda Park, Clonsilla, co. Dublin.
Derry	20 in.-Harriers ..	A. A. Watt ..	Glendernott Hill, Londonderry.
Down, North	22 in.-cross bred ..	P. B. Houston ..	Ballynickle, Comer, co. Down.
Faithlegg	22 in.-Harriers ..	J. M. Power ..	Faithlegg, Waterford.
Fermanagh	19 in.-H. and F. cross ..	A Committee ..	Dunbar, Enniskillen.
Finlag	Dwarf Foxhounds ..	R. T. Woods ..	Whitestown, Balbriggan.
Glasgow	18½ in.-Harriers ..	W. W. Watts and G. G. Bond ..	Littleton House, near Athlone.
Glin and Tarbert	19 in.-Harriers ..	Major Kiggel ..	Cahara, Glin, co. Limerick.
Kildare	20 in.-Foxhounds crossed ..	T. G. Waters ..	Kilpatrick, Monasterevin, co. Kildare.
Killultagh, etc.	22 in.-Foxhounds ..	H. J. McCance ..	Lisburn, co. Antrim.
Kinsale Club	18 in.-Harriers ..	R. Gillman ..	Sandy Cove, co. Cork.
Lecale	21 in.-Foxhounds ..	Col. Forde ..	Seaforde, co. Down.
Newbridge	21 to 22 in.-H. & F. cross ..	A Committee ..	Newbridge, co. Kildare.
Newry	20 in.-cross bred ..	T. D'Arcy Hoey ..	Drumcashlane, Down.
O'Hara's, Mr.	22 in.-Harriers ..	C. W. O'Hara ..	Annaghmore, Culloney.
Rockfield .. .. .	.. .. .	F. S. Hopkins ..	Rockfield, Nobber, co. Meath.
Roscommon Co. .. .. .	.. .. .	G. R. W. Sandford ..	Castlereagh, co. Roscommon.
Route	23 in.-H. and F. cross ..	Capt. Montgomery ..	Ballymagarry, Portrush, co. Antrim.
Sligo County	20 to 22 in.-cross bred ..	C. E. L'Estrange ..	Oakfield, Sligo.
Strabane	20 to 22 in.-Harriers ..	J. Herdman ..	Carricklee, Strabane, co. Tyrone.
Tynan	21 in.-Foxhounds ..	Sir Jas. Stronge ..	Fellowes Hall, Tynan, co. Armagh.
Upton	18 in.-cross bred ..	J. H. Payne ..	Beechmount, Upton, co. Cork.
Wicklow County	20 in.-F. and B. cross ..	W. Comerford ..	Glassnagar, Rathdrum, co. Wicklow.

BEAGLES.

Armagh Hunt Club	Beagles	J. Atkinson, jun., J.P. ..	Ardea, Loughgall, co. Armagh.
Bronwydd	14½ in.-Beagles ..	Sir M. Lloyd, Bart. ..	Bronwydd, Llandysill, S. Wales.
Carmarthen	16 in.-Beagles ..	W. F. D. Saunders ..	Glanrhwdd, Kidwelly, Carmarthenshire.
Castlecarr	15 in.-Beagles ..	W. N. Barlow ..	Castlecarr, Kanturk, co. Cork.
Caynam	15 in.-Beagles ..	Sir W. M. Curtis, Bart. ..	Caynam Court, Llandovery, Salop.
Chester	15½ in.-Beagles ..	J. T. Pownell ..	Lache Lane, Chester.
Christchurch, Oxford	13 in.-Beagles ..	T. C. Toler ..	Garsington, Wheatley, Oxford.
Cockermouth	14 in.-Beagles ..	Col. G. Thompson ..	Wellfield, Longcroft, Cockermouth.
Darlington	17 in.-Beagle H. ..	T. Watson ..	Darlington.
Dubourg's, Mr. S.	14 in.-Beagle ..	S. Dubourg ..	Cowshot Manor, Woking.
Essex Border .. .. .	.. .. .	R. B. Colvin ..	Monkham's, Waltham Abbey.
Ilum's, Mr.	15 in.-Beagles ..	R. Hunt ..	Boreaston Hall, Shrewsbury.
Lease, J. A.	15 in.-Beagles ..	J. A. Pease ..	Hutton Hall, Guisborough.
Le-y-Ghent	14½ in.-Beagles ..	W. Foster ..	Horton-in-Ribblesdale, Settle.
Loyal Rock	16 in.-Beagles ..	R. Stevenson and J. Macfie ..	Higher Bebington, Birkenhead, Cheshire.
Trinity College, Camb.	15 in.-Beagle H. ..	C. F. Young ..	Histon Road, Cambridge.
Wattlefield .. .. .	.. .. .	E. W. Routh Clarke ..	Wattlefield Hall, Wymondham.
Warwickshire, North	15 in.-Beagles ..	E. H. Humphreys ..	Rock Hill, Bromsgrove, Worcestershire.

Cricket Fixtures for 1886.

MAY.

5. M.C.C. Anniversary Meeting and Dinner.
6. At Lord's—M.C.C. and Ground v. Middlesex Colts.
10. At Lord's—Colts of the North v. Colts of the South.
13. At Lord's—M.C.C. and Grnd. v. Derbyshire.
17. At Lord's—M.C.C. and Grnd. v. Lancashire.
17. At Oval—Surrey v. Hampshire.
20. At Lord's—M.C.C. and Ground v. Sussex.
20. At Oval—Surrey v. Essex.
24. At Lord's—M.C.C. and Grnd. v. Yorkshire.
24. At Oval—Surrey v. Leicestershire.
24. At Stoke—Staffordshire v. Warwickshire.
27. At Lord's—M.C.C. and Ground v. Kent.
27. At Manchester—Lancashire v. Sussex.
27. At Oval—Surrey v. Middlesex.
28. At Stoke—Staffordshire v. Northants.
31. At Lord's—Middlesex v. Kent.
31. At Cambridge—Cambridge University v. M.C.C. and Ground.
31. At Nottingham—Notts v. Sussex.
31. At Derby—Derbyshire v. Lancashire.
31. At Oxford—Oxford University v. Surrey.

JUNE.

3. At Lord's—M.C.C. and Ground v. Notts.
3. At Cambridge—Camb. University v. Yorks.
3. At Oval—Surrey v. Gloucestershire.
7. At Lord's—Middlesex v. Yorkshire.
7. At Brighton—Sussex v. Gloucestershire.
7. At Leicester—Leicestershire v. Cheshire.
7. At Birmingham—Warwickshire v. M.C.C. and Ground.
10. At Lord's—Middlesex v. Gloucestershire.
10. At Oxford—Oxford University v. Lancs.
10. At Stockport—Cheshire v. Yorkshire.
14. At Lord's—Eleven of the North v. Eleven of the South (Whit-Monday match).
14. Yorkshire—Yorkshire v. Kent.
14. At Nottingham—Notts v. Surrey.
14. At Brighton—Sussex v. Hampshire.
14. At Leyton—Essex v. Hertfordshire.
14. At Northampton—Northamptonshire v. Warwickshire.
14. At Cambridge—Cambridge University v. Gentlemen of England.
17. At Lord's—Middlesex v. Notts.
17. At Manchester—Lancashire v. Kent.
17. At Derby—Derbyshire v. Yorkshire.
21. At Lord's—Middlesex v. Surrey.
21. At Derby—Derbyshire v. Kent.
21. At Oxford—Ox. Univ. v. M.C.C. and Grnd.
21. At Sheffield—Yorks. v. Cambridge Univ.
24. At Oval—Surrey v. Cambridge University.
24. At Maidstone—Kent v. Notts.
24. At Huddersfield—Yorkshire v. Sussex.
24. At Manchester—Lancashire v. Derbyshire.
25. At Leicester—Leicestershire v. Warwickshire.
28. At Lord's—M.C.C. and Grnd. v. Camb. Univ.
28. At Sheffield—Yorkshire v. Surrey.
28. At Manchester—Lancashire v. Oxford Univ.
28. At Southampton—Hampshire v. M.C.C. and Ground.

JULY.

1. At Lord's—M.C.C. and Ground v. Ox. Univ.
1. Gloucestershire—Gloucestershire v. Sussex.
1. At Nottingham—Notts v. Yorkshire.
1. Lancashire—Surrey v. Lancashire.
1. At Northampton—Northamptonshire v. Staffordshire.
1. At Leyton—Essex v. Norfolk.
2. At Southampton—Hampshire v. Herts.

5. At Lord's—Oxford v. Cambridge.
5. At Derby—Derbyshire v. Surrey.
8. At Manchester—Lancashire v. Yorkshire.
8. At Brighton—Sussex v. Kent.
8. At Leicester—Leicestershire v. Surrey.
9. At Lord's—Eton v. Harrow.
9. At Stockport—Cheshire v. Warwickshire.
12. At Lord's—Gentlemen v. Players.
12. At Birmingham—Warwickshire v. Leicestershire.
15. At Oval—Gentlemen v. Players.
15. At Lord's—M.C.C. and Ground v. Northamptonshire.
15. At Manchester—Lancashire v. Essex.
15. At Tonbridge—Kent v. Sussex.
15. At Halifax—Yorkshire v. Cheshire.
19. At Nottingham—Notts v. Lancashire.
19. At Gravesend—Kent v. Derbyshire.
19. At Southampton—Hampshire v. Surrey.
19. At Birmingham—Warwickshire v. Staffs.
22. At Lord's—M.C.C. and Ground v. Norfolk.
22. At Brighton—Sussex v. Notts.
22. At Beckenham—Kent v. Surrey.
22. At Manchester—Lancs. v. Gloucestershire.
26. At Oval—Surrey v. Sussex.
26. At Sheffield—Yorkshire v. Gloucestershire.
26. At Lord's—M.C.C. and Gr. v. S. Wales Club.
28. At Lord's—Rugby v. Marlborough.
28. At Norwich—Norfolk v. Essex.
29. At Nottingham—Notts v. Gloucestershire.
29. At Dewsbury—Yorkshire v. Lancashire.
29. At Southampton—Hampshire v. Somerset.
30. At Lord's—M.C.C. and Gr. v. Rugby School.

AUGUST.

2. At Canterbury—Kent v. Yorkshire (Canterbury week begins).
2. At Oval—Surrey v. Notts.
2. At Lord's—M.C.C. and Gr. v. Clifton Coll.
2. At Southampton—Hampshire v. Sussex.
2. At Leyton—Essex v. M.C.C. and Ground.
2. At Birmingham—Warwickshire v. Northamptonshire.
2. At Manchester—Lancashire v. Cheshire.
2. At Derby—Derbyshire v. Gloucestershire.
5. At Canterbury—Kent v. M.C.C. and Grnd.
5. At Oval—Surrey v. Derbyshire.
5. At Manchester—Lancashire v. Notts. (Barlow's benefit).
6. At Norwich—Norfolk v. M.C.C. and Ground.
6. At Cheltenham—Gloucestershire v. Middlesex.
9. At Sheffield—Yorkshire v. Notts.
9. At Brighton—Sussex v. Lancashire.
9. At Leyton—Essex v. Surrey.
9. At Hitchin—Hertfordshire v. M.C.C. & Gr.
12. At Oval—Surrey v. Lancashire.
12. At Gravesend—Kent v. Middlesex.
12. At Clifton—Gloucestershire v. Notts.
12. At Leeds—Yorkshire v. Derbyshire.
13. At Bishop's Stortford—Hertfordshire v. Essex.
13. At Stockport—Cheshire v. Leicestershire.
14. At Lord's—M.C.C. and Gr. v. Somersetshire.
16. At Brighton—Sussex v. Surrey.
16. At Bradford—Yorkshire v. Middlesex.
16. At Cheltenham—Gloucestershire v. Derbyshire (Cheltenham week begins).
16. At Manchester—Gentlemen v. Players v. Lancashire.
19. At Oval—Surrey v. Kent.
19. At Nottingham—Notts. v. Middlesex.
19. At Cheltenham—Gloucestershire v. Yorks.
19. At Taunton—Somersetshire v. Hampshire.
19. At Northampton—Northamptonshire v. Norfolk.
19. At Leyton—Essex v. Derbyshire.

20. At Lord's—M.C.C. and Gr. v. Hertfordshire.
23. At Lord's—M.C.C. and Ground v. Leicester-shire.
23. At Maidstone—Kent v. Lancashire.
23. At Brighton—Sussex v. Yorkshire.
23. At Clifton—Gloucestershire v. Surrey.
15. At Hertford—Hertfordshire v. Hampshire.
16. At Oval—Surrey v. Yorkshire.
16. At Nottingham—Notts. v. Kent.
16. At Clifton—Gloucestershire v. Lancashire.
16. At Birmingham—Warwickshire v. Somers-etshire.
10. At Leyton—Essex v. Lancashire.
10. At Birmingham—Warwickshire v. Cheshire.
10. At Scarborough (Scarborough Festival com-mences).

Cyclist Union Championship.

rs.	Won by	M.	H. M. S.
880	H. L. Cortis (Wanderers)	50	2 56 11½
881	G. L. Hillier (Stanley)	1	0 3 11½
"	G. L. Hillier (Stanley)	5	0 15 39½
"	G. L. Hillier (Stanley)	25	1 27 45½
"	G. L. Hillier (Stanley)	50	2 50 50½
882	F. Moore (Speedwell)	1	0 2 47½
"	J. S. Whatton (C. U.)	5	0 15 12½
"	F. Moore (Speedwell)	25	1 25 8½
"	J. Keith-Falconer (C. U.)	50	2 43 58½
83	H. W. Gaskell (R. H.)	1	0 2 55½
"	F. Sutton (Edgbaston)	5	0 16 42
"	C. E. Liles (L. A. C.)	25	1 24 43
"	H. F. Wilson (Surrey)	50	2 46 26
84	H. A. Speechly (Chelsea)	1	0 3 30½
"	R. Chambers (Speedwell)	5	0 15 36½
"	R. H. English (Newcastle)	25	1 25 20½
"	F. R. Fry (Bristol)	50	2 51 16½
"	C. E. Liles (L.A.C.) Tricy.	1	0 3 29½
"	C. E. Liles (L.A.C.) Tricy.	5	0 17 30½
"	C. E. Liles (L.A.C.) Tricy.	25	1 28 58
5	S. Sellars (Preston)	1	0 2 46½
"	M. Webber (Isle of Wight)	5	0 14 22½
"	R. H. English (Newcastle)	25	1 20 13
"	R. H. English (Newcastle)	50	2 45 13½
"	P.Furnivall(Beretta C.C.)T.	1	0 3 5½
"	R. Cripps (Notts.) Tricy.	5	0 16 53½
"	G. Gatehouse(C.U.B.C.)T.	25	1 26 20½

Principal Races in 1886.

- apton Park Gd. H. H'cap. (2 m.) Tu., Feb. 2.
ningham Gd. Ann. St.-ch. (3 m.) Tu., Feb. 9.
r Oaks National Hurdle (2 m.) W., Feb. 10.
down Grand Prize (2 m.) W., Feb. 24.
ydon International Hdle.(2½ m.) Tu., Mar. 2.
olnshire Handicap (1 m.) W., Mar. 24.
rpool Grand National (4½ m.) F., Mar. 26.
rpool Spring Cup (1½ m.) S., Mar. 27.

- Althorp Park Stakes (5 furs.) Tu., Mar. 30.
Northamptonshire Stakes (1½ m.) W., Mar. 31.
Leicestershire Spring H'cap (1 m.) S., Apr. 3.
Great Metropolitan Stakes (2½ m.) Tu., Apr. 6.
Hyde Park Plate (5 fur.) W., Apr. 7.
City and Suburban (1½ m.) W., Apr. 7.
Babraham Stakes (1 m. 17 yds.) W., Apr. 14.
Craven Stakes (Ancaster Mile) Th., Apr. 15.
Newmarket Handicap (1½ m.) F., Apr. 16.
Two Thousand Guins. (1 m. 17 yds.) W., Apr. 28.
One Thousand Guins. (1 m. 17 yds.) F., Apr. 30.
Chester Cup (2½ m.) W., May 5.
Great Cheshire Handicap (1½ m.) Th., May 6.
Payne Stakes (1 m. 2 fur. 73 yds.) W., May 12.
Somersetshire Stakes (1½ m.) W., May 19.
Woodcote Stakes (6 fur.) Tu., May 25.
The Derby (1½ m.) W., May 26.
The Oaks (1½ m.) F., May 28.
Grand Prize of Paris (1 m. 7 fur.) Sun., Jun. 6.
Ascot Stakes (about 2 m.) Tu., June 8.
Prince of Wales's Stkes. (1m. 5 fur.) Tu., June 8.
Royal Hunt Cup (New Mile). W., June 9.
Ascot Gold Cup (2½ m.) Th., Junero.
Rous Memorial (1 m.) Th., Junero.
Alexandra Plate (3 m.) F., June 11.
Hardwicke Stakes (1½ m.) F., June 11.
Northumberland Plate (2 m.) W., June 30.
Cumberland Plate (1½ m.) Tu., July 6.
Newmarket July Stakes (T.Y.C.) Th., July 6.
Chesterfield Stakes (5 fur.) Th., July 8.
Liverpool July Cup (1½ m.) W., July 14.
Sandown Park (Eclipse Stakes) Th., July 22.
Goodwood Stakes (2½ m.) Tu., July 27.
Stewards' Cup (T.Y.C.) W., July 28.
Goodwood Cup (2½ m.) Th., July 29.
Chesterfield Cup (1½ m.) F., July 30.
Brighton Stakes (1½ m.) Tu., Aug. 3.
Brighton Cup (1 m.) W., Aug. 4.
Astley Stakes (5 fur.) F., Aug. 6.
Lewes Handicap (2 m.) F., Aug. 6.
Great Ebor Handicap (1½ m.) W., Aug. 25.
Prince of Wales's Stakes (T.Y. C.) W., Aug. 25.
Great Yorkshire Stakes (1½ m.) Th., Aug. 26.
Great Yorkshire Handicap (1½ m.) Tu., Sep. 14.
Champagne Stakes (5 fur. 152 yds.) Tu., Sep. 14.
Doncaster S.Leger (1 m. 6 f. 132 yd.) W., Sep. 15.
Portland Plate (T. Y. C.) Th., Sep. 16.
Doncaster Cup (about 2 m. 5 fur.) F., Sep. 17.
Park Hill Stakes (1 m. 6 fr. 132 yds.) F., Sep. 17.
Manchester Autumn H'cap (1½ m.) S., Sep. 25.
Great Foal Stakes (1 m. 2 fr. 73 yds.) Tu., Sep. 28.
Great Eastern Handicap (6 fur.) W., Sep. 29.
Newmarket Oct. Hp. (1 m. 2 f. 73 y.) Th., Sep. 30.
Rous Memorial (5 fur.) F., Oct. 1.
Clearwell Stakes (T. Y. C.) M., Oct. 11.
Cesarewitch Stakes (2 m. 2 f. 28 yd.) Tu., Oct. 12.
Middle Park Plate (6 fur.) W., Oct. 13.
Champion Stakes (1 m. 2 f. 73 yds.) Th., Oct. 14.
Great Challenge Stakes (6 fur.) F., Oct. 15.
Sandown Autumn Cup (1 m.) Th., Oct. 21.
Criterion Stakes (6 fur.) M., Oct. 25.
Cambridgeshire (1 m. 240 yds.) Tu., Oct. 26.
Dewhurst Plate (7 fur.) W., Oct. 27.
Liverpool Autumn Cup (1½ m.) Th., Nov. 11.
Lancashire Handicap (1 m.) F., Nov. 12.
Derby Cup (1 m.) W., Nov. 17.
Midland Counties Handicap (1½ m.) Tu., Nov. 23.
Warwick Cup (1 m.) W., Nov. 24.
Manchester November H'cap (1½ m.) S., Nov. 27.

ADDENDA.

[Consisting of Occurrences and Corrections up to April 9th.]

Mr. Gladstone's Proposed Home Rule Measure.

(Introduced April 8th, 1886.)

(1) A **Legislative Body** to sit in Dublin and have the control of the executive government of Ireland and its legislative business.

The Parliament to be composed of **two orders**, with power in either to demand separate voting, and thus put an absolute veto on a proposal of legislation till the next dissolution, or for a period of three years.

(a) The **First** to consist of 28 Representative Peers and 75 other members elected for ten years by voters having £25 a year qualification, and possessed of a property qualification of £200 per annum. The present 28 Representative Peers to form part of this body at their option, with limited power of the Crown to fill up vacancies within a defined period.

(b) The **Second** order to consist of the present 103 university, county, and borough members, with the addition of 101 elected for five years.

The Irish members to cease to sit at Westminster.

(2) The **Executive** to remain as now for the present, but subject to any changes which might be worked out by the new legislative body. The Viceroy to be assisted by a Privy Council, and not being the representative of any party, would not go out of office with the Government. The religious disability at present attached to that office to be removed.

(3) **Law.**

(a) The **Judges of the Superior Court** now holding office, who desire it, may demand a retiring pension. In future, to hold office during good behaviour; their salaries to be charged on the Irish Consolidated Fund; to be removable only by a joint address from the two orders of the Legislative body; and appointed under the influence of the responsible Irish Government. An exception is made in the case of the Court of Exchequer.

(b) The **Irish Constabulary** to remain for the present under the same terms of service and the same authority; the British Consolidated Fund to contribute to its support anything it might cost in excess of £1,000,000; the Irish Legislature, after two years, having the right to fix the charge for the whole police and constabulary of Ireland with a saving of existing rights. The question of the ordinary police is left open.

(4) **Civil Service.** The Service in the future to be absolutely under the Legislative body. Present Civil servants, after two years, to be entitled to claim a discharge on the terms usual when offices are abolished.

(5) **Finance.**

(a) **Imperial charges.** Ireland to contribute one-fiftieth to the public expenditure instead of one-twelfth as at present, with the result that the revenue from customs, excise, stamps, income tax, and post office, would amount in future to £8,350,000, the charges payable for Ireland for army and navy, civil service, constabulary, and sinking fund of the Irish portion of the National Debt would amount to £7,946,000, leaving a surplus of £404,000.

(b) **Taxation.** The power of taxation to be granted to the new Legislative body, with the exception of the Excise and Customs.

(6) **Securities.** To be formulated for—

(a) **Unity of the Empire.**

(b) **Protection of the minority**, including landlords, civil servants, and all concerned in the government of the country.

(c) **Protestants.**

The **Land Bill**, which is intimately connected with the above plan of Home Rule, is to be introduced by Mr. Gladstone on the 15th April.

April 9th.—Mr. Henneage has formally tendered his resignation of the Chancellorship of the Duchy of Lancaster, and Mr. Robert Bickersteth, M.P., secretary to Lord Kimberley at the India Office, has also resigned his office,—both through disagreement with Mr. Gladstone's Irish policy.

Forster, Rt. Hon. William Edward, P.C. was b. at Bradpole, Yorkshire, July 11th, 1824. Educated amongst the Society of Friends, his family being of old Quaker descent. Entered into business life, and became a manufacturer at Bradford, in partnership with Mr. W. Fife. Visited Connemara (1846-47) as distributor of funds collected by the Society of Friends for the relief of the Irish. Edited a new edition of Clarkson's "Life of William Penn" (1848). Married (1850) the eldest daughter of the late Dr. Arnold, of Rugby, by which marriage his formal connection with the Society of Friends was severed. Liberal candidate for Leeds (1851) but was unsuccessful. Returned in the Liberal interest as member for Bradford unopposed (1861), and continued until the time of his death to represent that constituency. Took a very prominent part in the discussion on the Civil War in America. Became Under-Secretary for the Colonies (1865) under Lord Russell, his connection with this office leading him to evince throughout his political career, a deep interest in all matters relating to the interests of the Colonies, and to become an exponent of the idea of Imperial Federation (q.v.). In conjunction with Lord (then Mr.) Cardwell, Mr. Forster then in opposition, brought in, unsuccessful, their Education Bill (1867-68). On Mr. Gladstone's

becoming Premier (1868) Mr. Forster became Vice-President of the Council, and (1870) introduced the Elementary Education Bill, with which act of legislation his name will be ever most intimately and prominently associated. Took charge (1871) of the Ballot Bill, which passed 1872. After the general election of 1874, he took an active part in opposition, and on Mr. Gladstone's temporary retirement from the leadership of the Opposition, Mr. Forster was seriously mentioned as his successor, but publicly declined to be put in nomination. Elected F.R.S. (1875), Lord Rector of Aberdeen (1875). Visited Servia and Turkey (1876). On the return to power of Mr. Gladstone (1880), Mr. Forster became Chief Secretary for Ireland, and introduced the Compensation for Disturbances Bill, which was carried through the Commons but rejected by the Lords by 282 to 51. The Land League extending its influence and agrarian crime increasing, Mr. Forster, resident in Dublin (1880-81), had to contend with the outbreak of crime inaugurated by the murder of Lord Mountmorres, necessitating the introduction by Mr. Forster of the Protection Acts, which passed (March 2nd, 1881) into law. A stormy period followed in the House of Commons, Mr. Forster being attacked by the members of the Irish party with great bitterness. In October Mr. Parnell, with other prominent Irish members, were arrested. Visited (March 1882) the disaffected districts of Ireland, and on one occasion narrowly escaped with his life. On the release of Messrs. Parnell, Seaton, and O'Kelly from Kilmainham gaol, Mr. Forster resigned (May 1882). In the session of 1883, after the passing of the Crimes Act and the Arrears Acts, Mr. Forster was attacked with much vehemence by Mr. Parnell, and the famous debate in the House between the leader of the Irish party and Mr. Forster will be long remembered. In the South African question and Sir Charles Warren's expedition Mr. Forster took an active interest. Divergence of views as to the responsibility of the Liberal Government with regard to the occupation of Egypt caused Mr. Forster to take an antagonistic position towards Mr. Gladstone's policy, and in 1883-84 Mr. Forster severely criticised the action of the Liberal party. In 1885, after the fall of Khartoum, he recorded his vote against the ministry in the debate on Sir Stafford Northcote's motion. Mr. Forster throughout his political career has been distinguished for the high tone of his life and his fearless independence, this latter characteristic being noticeable in his contest with the local caucus who opposed his recent return to Parliament. For some time Mr. Forster's health had been failing, and he visited Baden, returning to Torquay, where it was hoped he would recover his strength. A relapse set in, and on April 5th, 1886, he died in London, and was honoured with a public funeral service at Westminster Abbey April 9th. Mr. Gladstone and Sir Michael Hicks Beach, in the House of Commons on April 6th, paid an appropriate tribute to Mr. Forster's memory.

Russell, Rev. Lord Wriothesley, Canon of Windsor, third son of John, sixth Duke of Bedford, was b. 1804. Educated at Trin. Coll., Cambridge, where he graduated M.A. (1829). Rector of Chenies (1829-86); Canon of Windsor (1840); Chaplain to H.R.H. the late Prince Consort; Chaplain in Ordinary and Clerk of

the Closet to the Queen (1850-86). Died April 1886.

Oxford and Cambridge Boat Race, 1886. This was rowed on Saturday, April 3rd, and resulted in a victory for Cambridge by $\frac{1}{2}$ of a length.

Parcel Post. On May 1st maximum weight of parcels sent by post will be raised from 7 lb. to 11 lb. Rate in future to be 1d. for every pound after the first pound, the charge for which will still be 3d., e.g.:

lb.	s.	d.
2	.	4 $\frac{1}{2}$
3	.	6
4 (not exceeding)	.	7 $\frac{1}{2}$
11	.	16

From May 1st the Postmaster-General, subject to certain rules and conditions, will give compensation to the extent of £1 for the loss or damage of any parcel in the post. No legal claim, however, against the Post Office will be recognised.

The Army Estimates for the Financial Year 1886-87. The net estimate for the year is £18,233,200. With a sum of £2,939,736 set down as appropriations in aid, this makes the gross estimate £21,172,936. This net sum of £18,233,200 as compared with the corresponding sum estimated for 1885-86—£17,750,700—shows an apparent increase of net expenditure of £482,500. A statement of the principal points of difference between the estimates of the coming year and those of 1885-86 shows that this £482,500 is the difference between increases to the amount of £1,320,400 and decreases of £837,900. The chief items of increase are:—The charge due to additional numbers, £246,000; warlike stores, £211,200; naval armaments, £150,000; works for submarine mining establishments and manufacturing departments, £72,000; Militia, Yeomanry, and Volunteers, £50,100; and additional expenditure consequent on the occupation of Egypt, £416,000. To this last item should be added the sum of £58,000 for the native force garrisoning Suakin. The £837,900 which represents the total amount of decreases is made up almost entirely of three items—£500,000 for the Bechuanaland expedition, £120,000 reduction in contract prices for supplies, and £200,000 set down as the increased contributions from India for effective charges. The difference, therefore, between the two years is £482,500, of which sum nearly the whole is absorbed by the effective services. Thus, of the total estimate of £18,233,200, the effective services take £15,156,900 as against £14,712,900 in the last estimates, an increase of £444,000; while the non-effective services are reckoned at £3,076,300 as against £3,037,800, an increase of £48,500. The differences in the estimates for the non-effective services are unimportant. Of the 16 votes included in the effective services, 12 show increases, which in all amount to £660,300; the remaining four show decreases amounting to £216,300. The two chief items of decrease are shown in the two largest votes. The first vote, which is for the pay of the general staff, regimental pay and allowances, and other charges, amounts to £4,457,300 as against £4,543,000 in the last estimates, or a decrease of £85,700. The only other considerable decrease is in the vote of £3,282,000 for provisions, forage, fuel, transport, and other services, a sum less by £116,000 than the £3,398,000 set down for the current

year. All the other 12 votes show increases, of which it will be sufficient to mention that the Militia pay and allowances now amount to £555,000 instead of £526,900, an increase of £28,100; the Army Reserve force pay and allowances (including enrolled pensioners) to £423,000 instead of £384,500, an increase of £38,500; commissariat, transport, and ordnance store establishments to £520,200 in place of 464,000, an increase of £56,200; clothing establishments, 866,500 as against £801,500, or an increase of £65,000; supply, manufacture, and repair of warlike and other stores, £2,569,000 as against £2,227,800, showing the largest increase of all—namely, £341,200; and lastly, works, buildings and repairs at home and abroad, £925,800 in place of £844,200, or an increase of £81,600. The six other heads of increase are trifling. In the estimates for the current year the number of men on the Home and Colonial Establishments of the Army, exclusive of those serving in India, was set down at 142,194, which number was increased by a supplementary vote by 35,000 men. The number in the present estimates is 151,867, an increase of 9,673 over the original estimate for the current year. The Regular Forces, Home and Colonial, are set down at 141,284; Army Reserve, 1st class, 51,000; 2nd class, 5,900; the Militia, 141,333; Yeomanry, 14,405; and Volunteers, 254,038. The total of the Home and Colonial Establishments is therefore 607,960. To this must be added 68,196 men of the Regular Forces serving in India. In the current year there were 61,597 men estimated as serving in India. Of this grand total of 676,156 men of all arms and ranks, the latest returns give 608,040 as effective. The number of horses (exclusive of officers' horses) on the British Establishment is 13,452; on the Indian, 9,746. The total numbers estimated for the coming year (exclusive of those in India) are 151,867. If from this number be deducted 2,534 on the General and Departmental Staff, and 815 for miscellaneous establishment, we find 148,518; and if from this number there be further deducted the staff of Militia, Yeomanry, and Volunteer Corps, we reach the number 141,284, the strength of the Regular Forces on the Establishment. The number 148,518 is made up of the following numbers belonging to the various branches of the service:—Cavalry, 13,733; artillery, 23,653; engineers, 6,075; foot guards, 5,878; infantry of the Line, 84,934; these last two items, with the addition of the permanent staff of the auxiliary forces, bring the total of infantry to 96,430, colonial corps, 2,712, and departmental corps, 5,915. A separate Parliamentary paper states the amounts included in the newly-issued estimates for military purposes in the colonies and in Egypt, and the probable repayments by the several colonies on the same account. The estimate of repayment is in no way altered from the previous year, and amounts to £309,000, of which Egypt is reckoned at £170,000. The total amount included in the Army Estimates for the colonies and Egypt is £2,793,560 as compared with £2,310,000 of the current year. The sum required for Egypt has increased by nearly half a million—namely, from £493,238 to £980,172, or about 35 per cent. of the whole. Explanations of the differences between the estimates of the current and coming financial years are also published with the usual details.

The Navy Estimates for 1886-87. The estimated expenditure (after deducting appropriations in aid) amounts to £12,993,100. This may be compared with the estimated expenditure of the current year, which, after the deduction of appropriations in aid, amounted to £12,386,500. In February of the present year a supplementary estimate was brought in amounting to £308,400, which made the total estimate for the year amount to £12,694,900. It will be seen, therefore, that the estimates for the coming year exceed those of the current year by £298,200. This increase of £298,200 is made up of the difference between the increases, amounting to £592,150, and six items of decrease, amounting to £293,950. Among the items of increase are £128,800 for wages and allowances of seamen and marines, and £19,300 for victuals and clothing of seamen and marines. The increase in the wages paid to dockyard artificers at home and abroad amounts to £60,000. The sum of £47,000 appears under the head of reduction in anticipated receipts for sale of ships. For ships building by contract there is an increased expenditure of £40,450. This year the sum of £51,500 is set apart for torpedoes, which are to be purchased under special circumstances by the Admiralty, whereas formerly they were obtained through the War Department. There is also a very considerable increase in the estimate of expenditure for transferable and hydraulic gun mountings and for torpedo carriages and gear. Thus the expenditure under these and kindred heads in the present estimate amounts to £486,400 as opposed to £308,900 for the current year, being an increase of no less than £177,500. Among the items which make up the main decrease, that of naval stores is prominent. Under this head appears no less a sum than £189,000, while again in new works, buildings, and repairs a saving of £55,000 has been effected. The other items which contribute to form the total decrease of £293,950 are of less importance. It has been already stated that the net estimate for the coming year is £12,993,100 as against £12,694,900 in the current year. This expenditure is divided between the effective services, which absorb £10,689,100 as against £10,418,000 for the current year, and the non-effective services, which take £2,052,000 for the coming year as against £2,065,900 for the current year. In the effective services there are 14 votes, and most of them show an increase. The first vote is for the wages of seamen and marines, the estimate for which has risen from £2,774,100 to £2,902,900, an increase of £128,800. The increase in the expenditure for victuals and clothing for seamen and marines amounts to £19,309, the estimates being for the current year £945,100, and for 1886 £964,400. The vote for the Admiralty Office shows an increase of £5,100, and amounts to £203,400. In the coast-guard service and Royal Naval Reserves, etc., the augmentation in expenditure is £2,300, the vote being £207,600. The scientific branch shows an increase of £600 only, the sum allowed for it being £113,200. There is an important increase of £58,000 in the vote for dockyards and naval yards at home and abroad, which amounts for the coming year to £1,729,500 as against £1,671,500 for 1885-86. Another important increase is that for machinery and ships built by contract, which attains the sum of £245,300, the vote for 1886-87 being £2,371,300.

as against £2,126,000 for the year about to close. Among items that show a decrease is that of naval stores, the vote for which for 1886-87 is £1,206,000, against £1,348,000, being a diminution of £142,000. A saving of £36,900 is also effected on new works, buildings, yard machinery, and repairs. The number of officers, seamen, boys, coastguards, and Royal Marines, for whom provision is made in the first vote, is 61,400, or 100 men less than the number voted last year. These figures are composed of officers and seamen afloat, 28,494; reserves and under training, 8,307; pensioners, 650; boys for service in the fleet, 3,874; boys under instruction in training ships, 2,600; coastguard service, officers and men, 4,000; or in all 47,925 for 1886-87 against 45,564 for 1885-86. The Royal Marines, including headquarters staff and services afloat and ashore, number for 1886-87, 12,705, a slight reduction on the last vote, when the numbers were 12,770. In the naval establishment on shore the numbers, inclusive of the Royal Marines borne in ships' books or at divisional headquarters are 768 for 1886-7. The total number of steamships in commission at the end of last year was 191, more by 10 than the year before. These figures include 30 armour-plated ships, 1 frigate, 26 corvettes, 4 more than in the previous year; 1 torpedo ram; 16 sloops, against 14 in 1884; 22 gun vessels; 38 gunboats, 3 more than in 1884; 2 despatch vessels, 25 miscellaneous vessels, being 1 less than last year; 7 troop ships and troop store ships, 4 Indian troop ships, 4 Royal yachts, and 5 surveying vessels, 1 more than in the previous year. The sailing vessels in commission numbered, at the end of 1885, 30, being 4 less than in the autumn of 1884. These sailing vessels are 1 sloop, 4 schooners, 6 training brigs, and 19 coastguard tenders (late revenue cruisers), this last item showing a decrease of 4 on the numbers of the previous year. The stationary ships in 1885 numbered 37, being an increase of 1 on the former numbers. These ships comprised 15 flag, receiving, steam reserve, and store ships, and 22 training and drill ships, against 21 ships of this class in 1884.—*Times*.

London Corporation Finance. An estimate of the probable receipts and expenditure of the Corporation, in respect of the City's cash, for 1886 has been made by the Coal, Corn, and Finance Committee. It is based chiefly on an average of the last three years. The receipts are estimated at £167,645. They include rents, less cost of management, £125,481; interest on Government securities, £3,132; probable surplus on markets, £1,999; brokers' rents, £8,341; judiciary fees, £1,425; Mayor's Court fees, £8,112; officers' surplus fees, profits, etc., £5,845; sundry and casual receipts, £1,820; and a balance brought forward of £9,562. In reckoning a small surplus on the markets, the Central Markets, Leadenhall, Billingsgate, and Farringdon are treated as probably resulting in a profit, and the Cattle Market and the Central Fish Market in a loss. The expenditure for 1886 is estimated at £196,755. It includes the new tax on corporate property, £4,100; expenses of magistracy, £8,449; police expenses, £27,444; administration of criminal justice, £6,655; office of coroner, £1,467; civil government, £53,283; pensions and almshouses, £11,371; charitable donations, £5,808; expenses of the City of London School, Freemen's

Orphan School, and Guildhall School of Music, £11,094; City library and museum, £5,315; Port of London sanitary expenses, £3,206; maintenance of West Ham Park, £1,289, and Epping Forest, £4,363; fire hydrants, £981; Bills in Parliament, £7,674; additions to Sessions-house, Old Bailey, £2,500; reconstruction of Guildhall and art gallery, £5,000; Queen Anne's statue, St. Paul's Churchyard, £2,000; erection of a new school of music, £19,000; annual grant Royal College of Music, £1,000; vote for tapestry, £1,000; Colonial and Indian Exhibition reception, £3,000; drainage of Wanstead Flats, £800; and sundry, miscellaneous, and incidental expenditure, £7,399. There is thus an estimated deficiency of £29,100.

Mineral Statistics. The mining and mineral statistics of the United Kingdom for 1885, prepared by Her Majesty's Inspectors of Mines, which will shortly be printed, show the output of coal in the United Kingdom in 1885 to have been 159,351,418 tons, in which 520,632 colliers were engaged, or 306 tons per collier. In 1884 the production was 160,757,779 tons, with 520,376 colliers, or 309 tons per collier. In 1883, 163,737,327 tons, with 514,933 colliers, or 318 tons per collier; and in 1882, 156,499,977 tons, with 503,987 colliers, or 311 tons per collier. The output of coal in Northumberland and North Durham was 16,427,529 tons, being a decrease, as compared with 1884, of 414,312 tons. That in South Durham was 20,402,479 tons, a decrease of 537,105 tons; North and East Lancashire, 9,847,709 tons, a decrease of 163,993 tons; West Lancashire and North Wales, 13,176,944 tons, an increase of 377,745 tons; Yorkshire, 18,497,778 tons, a decrease of 722,366 tons; Derby, Nottingham, and Leicestershire, 16,963,684 tons, an increase of 883,002 tons; North Stafford, Cheshire, and Shropshire, 6,324,600 tons, an increase of 92,900 tons; South Stafford and Worcestershire, 9,862,497 tons, an increase of 174,450 tons; Monmouth, Somerset, and Cornwall, 9,352,072 tons, a decrease of 179,369 tons; South Wales, 17,207,540 tons, a decrease of 1,019,211 tons; Scotland (East), 14,905,620 tons, an increase of 120,722 tons; Scotland (West), 6,382,966 tons, an increase of 18,824 tons. The net decrease in the whole country is 1,406,361 tons. The heavy decrease in Yorkshire is owing to a two months' stoppage of the pits, caused by a strike, and the increase in Derby and Nottingham is due to supplies usually obtained from Yorkshire being drawn from the neighbouring coalfields.

Emigration and Immigration, 1885. In the form of a parliamentary paper a return has been issued of the statistical tables relating to emigration and immigration from and into the United Kingdom in the year 1885, and a report to the Board of Trade thereon. The report to the Secretary of the Board of Trade calls attention to the further decline of emigration, and to the excess of emigrants over immigrants, which has taken place during the year. In 1848 there was a decline as compared with 1883, and now there is a further decline, which is not so marked in itself as the decline in the previous year, but which contributes to make the total decline in the emigration, since the maximum years of 1882 and 1883, very considerable. The number of emigrants in 1885 was, including foreigners, 264,385, while those of

British and Irish origin only numbered 207,644. These figures show a decrease in 1885 of 39,516 on the total number of 1884. The total falling off in emigration is thus from 303,901 to 264,385. The general statement of emigration in 1885 shows that the total number of British emigrants to the United States was 137,687, the grand total, inclusive of foreigners, being 184,470. The British emigrants to British North America numbered 19,838, the grand total being 22,928; to Australasia, British 39,395, total 40,689; to Cape of Good Hope and Natal, British 3,268, total 3,960; to all other places, British 7,456, total with foreigners, 12,338. The general statement of immigration in 1885 shows that the total number of British, Irish, foreigners, and others from the United States in 1885 was 81,450; from British North America, 10,079; from Australasia, 8,272; from the Cape of Good Hope and Natal, 5,472; and from all other places, 8,276. These figures make a total of 113,549, being 9,917 less than in 1884.

Indian Budget Estimate for 1886-87, Chief particulars of the

Revenue	£75,798,700
Expenditure	£75,616,500

Surplus £182,200

The chief items are the Army expenditure, estimated at £17,424,300 (including exchange), an increase of £1,613,500 over the estimate of 1885-86. Famine Relief and Insurance, £1,361,300, a decrease of £138,700 in the last budget. Railways. The estimate includes an increase of State railway receipts of £1,092,284, but owing to the increased cost of the construction of railways there is contemplated a net loss for 1886-87 of £1,321,000; that of 1884-85 having been £846,034. Salt, one of the most important sources of Indian revenue, had during the eleven months ending January 31st, 1886, increased only 64,000 maunds (a maund equals 82 lb. avoidupois), only one-tenth of the increase in the corresponding eleven months of

1885-86, which was about two-thirds of the increase for 1883-84. Opium. The prospects of the opium crop are exceptional: the reserve at the end of the year is expected to stand at 29,200 chests—the price of Bengal opium for 1886-87 being calculated at 1,200 rupees per chest. It is anticipated the new Opium Convention with China will come into operation this year. The net import of gold into India during the first ten months of 1885-86 amounted to 12,674,490 rupees; the net import of silver amounted to 93,778,117 rupees. The rate of exchange being taken at 1s. 6d., and provision made for drawing by the Secretary of State for India in 1886-67 to the amount of £13,331,400. The Indian cash balance on March 31st, 1886, was anticipated to be £12,400,000. The rate of exchange, the falling off of the salt tax, the increased cost of railways and their extension, and the increase of military and other works, are stated in the minute to necessitate the reconsideration of the basis of the estimation of receipts and expenditure which have been taken in that of 1882-83. The introduction of the income-tax in Burmah is postponed for one year.

Bulgaria. Prince Alexander has intimated (April 8th) that he will submit to the arrangement made by the Powers, and accept the Sultan's firman.

United States. Bland Bill for free coinage of silver was rejected in the House of Representatives (April 8th) by 161 votes to 84.

New South Wales (April 8th). New Budget. Estimates of expenditure for the current year reduced by £500,000. Fresh taxation proposed by tax of 4d. in the £ on unimproved land exceeding in value £1,000, and 4d. in the £ on incomes exceeding £300. New duties to the extent of 5 per cent. *ad valorem* to be imposed upon the articles on the present free list, and additional duties are to be levied.

Notes and Memoranda.

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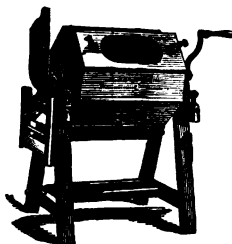
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Two Gold Medals.
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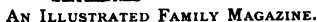
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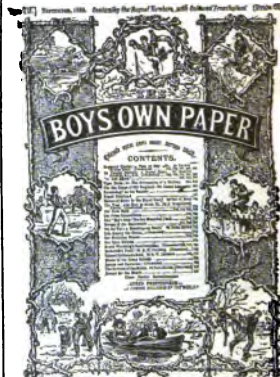
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